

From: [Duverna, Randolph - FSIS](#)
To: [Hrdy, David](#)
Cc: [MunizOrtiz, Jorge - FSIS](#)
Subject: Acute and Chronic PAD
Date: Friday, July 10, 2015 11:05:03 AM

David

(b) (5)

Regards,

Randy

[Randolph Duverna, PhD](#)

Chemist, Science Staff

USDA/FSIS/OPHS

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1400 Independence Ave., SW

Washington, DC 20250-3700

Phone: 202-690-6607

Fax: 202-690-6337

Randolph.duverna@fsis.usda.gov

From: [Bluhm, Louis - FSIS](#)
To: [Miller, David](#); [Crowley, Matthew](#); [Hrdy, David](#)
Cc: [Esteban, Emilio - FSIS](#); [Yee, Catalina - FSIS](#)
Subject: FSIS pesticide update
Date: Monday, June 22, 2015 12:39:06 PM
Attachments: [PDP Residue Priority List \(WLandLOAS\) 06-17-2015.docx](#)

Greetings everyone,

(b) (5)

Please let us know if you have any questions.

Thanks,
Lou

From: Bluhm, Louis - FSIS
Sent: Thursday, December 18, 2014 9:11 AM
To: Miller, David; Crowley, Matthew (Crowley.Matthew@epa.gov); hrdy.david@epa.gov
Cc: Bennett, Patty - FSIS; Esteban, Emilio - FSIS; Yee, Catalina - FSIS
Subject: FSIS pesticide update

Greetings EPA colleagues,

(b) (5)

If you have any questions or need additional information from us, please let us know. Enjoy the holidays!

Thanks, Lou

Louis Bluhm, Ph.D.

Lead Chemist

Laboratory Quality Assurance Staff (LQAS)

Administrator, Accredited Laboratory Program (ALP)

USDA FSIS OPHS

950 College Station Rd., Athens, GA 30605

Phone: 706-546-2359

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Email: louis.bluhm@fsis.usda.gov

From: [Duverna, Randolph - FSIS](#)
To: [Hrdy, David](#)
Cc: [Kishore, Rita - FSIS](#); [MunizOrtiz, Jorge - FSIS](#)
Subject: FSIS Prioritization
Date: Monday, November 30, 2015 4:27:18 PM
Attachments: [Chemical Priortization Paper Factors.docx](#)
[Chemical Priortization Residue EPA.pptx](#)

David,

In preparation for the upcoming meeting please find attached, the PowerPoint presentation that I will run through

A detailed description of each variables

See you Thursday,

Randy

Randolph Duverna, PhD
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From: [Bluhm, Louis - FSIS](#)
To: [Hrdy, David](#); [Miller, David](#); [Crowley, Matthew](#)
Subject: FW: Updated levels for pesticides
Date: Thursday, July 09, 2015 7:56:00 AM
Attachments: [Fish Extraction JAFc2015.pdf](#)
[filter-vial dSPE1.pdf](#)
[Sapozhnikova ACA 2013.pdf](#)
[Sapozhnikova jafc 2014.pdf](#)
[Yelena LCGC 2014.pdf](#)
[New Meat tolerances 2012.xlsx](#)
[LP-GC-MSMS 1.pdf](#)
[EPA-FSIS-ARS Pesticide list 070215.xlsx](#)
[MRLReport-pesticides livestock.xlsx](#)
[Pesticide summary table 06252015.xlsx](#)

Hi David, David, and Matt,

Having just returned from leave a few days ago, I confess that we here in FSIS have not gone through Steve's updated list yet. But I at least wanted to touch base with you to get a sense of whether you had an opportunity to review it, and how you might like to proceed.

Thanks,

Lou

From: Lehotay, Steven
Sent: Thursday, July 02, 2015 4:07 PM
To: 'Hrdy, David'; 'Miller.davidj@epa.gov'
Cc: Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS; Bluhm, Louis - FSIS; Sapozhnikova, Yelena; Johnston, John - FSIS; Ben-Ghaly, Labeed; Han, Lijun - ARS
Subject: RE: Updated levels for pesticides

Dear Davids,

We need your (EPA) input please prior to the Surveillance Advisory Team meeting in Aug. This is a big deal to us, and at SAT and IRCG meetings, EPA (via Sue Hummel) had been pressing FSIS for years to meet your monitoring needs. FSIS has made big strides to validate and implement the USDA-AMS method (derived from QuEChERS) for routine monitoring in the National Residue Program, and now we're ready to take it to the next level. They're purchasing 2 state-of-the-art GC-MS/MS instruments for this purpose, and we're getting an upgrade of our instrument, too.

Yelena Sapozhnikova *et al.* have devised a fast, powerful, high-throughput approach to monitor hundreds of targeted pesticides and environmental contaminants in seafood (and other commodities). See the attached publications. We are working with FSIS Western Lab and Lab Quality Assurance Staff to validate and implement the better method in meats and catfish. I expect that more than a million dollars in staff time, instruments, and supplies have already gone into the project to reach this point.

We have done preliminary work for up to 250 analytes in cattle, hog, chicken, and seafood muscle tissue, and we've decided to move forward with a 1-day validation each of our current list of analytes (see attached EPA-FSIS-ARS Pesticide List 7-2-15) in cattle, chicken, and hog muscle since we have that method ready.

HOWEVER, when we get the instrument upgrade later this summer, we want to validate the final method according to the full FSIS 3-day validation protocol. Thus, we need to FINALIZE the targeted list of analytes and validation levels in cattle, hog, and chicken muscle. I downloaded the MRL spreadsheet from the Global MRL Database to show how we put the attached EPA-FSIS-ARS Pesticide List 7-2-15 together based on the Pesticide Summary Table 6-25-15 that FSIS provided us, presumably working with you/EPA. Also see the email from Lou Bluhm below.

Frankly, we should have all been working together on this list in the first place. It has cost us months of work to reach this point with our current list, only to see that we have scores of pesticides to drop and add before we finalize the method.

I ask EPA and FSIS to look over the EPA-FSIS-ARS list with highlights in blue and green, purple, and black text – bold or not – and make revisions or approvals of our proposed final target list, including more additions. I can't vouch for the accuracy of every single entry, but we've all spent many hours poring through it to reach this state.

In particular, what should we do about the metabolites? The residue definitions can be a real bear, and some pesticides will never occur in tissues even if the animal eats the formulation. Perhaps we should have a conference call about this, and I ask Lou to coordinate that if you all agree.

Thanks very much, and Happy Independence Day!
Steve

Steven J. Lehotay, PhD
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Eastern Regional Research Center
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Wyndmoor, PA 19038
USA
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fax: 1-215-233-6642
email: Steven.Lehotay@ars.usda.gov
<http://www.ars.usda.gov/pandp/people/people.htm?personid=3300>

From: Bluhm, Louis - FSIS
Sent: Thursday, June 25, 2015 4:44 PM
To: Sapozhnikova, Yelena; Lehotay, Steven
Cc: Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS
Subject: Updated levels for pesticides

Hi Yelena and Steve,

The LQAS Chemistry Staff has created a table of updated levels based on the information you sent us. It cross-references what is already present in PST5, official tolerances or other guidance, and EPA prioritization tables. Some analytes do not have an official level available. For analogous compounds, (b) (5)

(b) (5)

Now that FSIS is supporting the PDP, EPA has provided FSIS with a list of analytes with various priorities (HH = Highest, H = High, M = Medium, L = Low). Some of these analytes were missing in the table you sent. We added those analytes of concern to the attached table, with the hope that you can incorporate them into your validation.

If you have specific questions about the table, feel free to contact us. I will be out of town until July 7, but Oliver should be available to assist in my absence. We are in audit season now, so the staff will be travelling heavily over the next few months, primarily to State laboratories.

Thanks, Lou

Louis Bluhm, Ph.D.

Lead Chemist

Laboratory Quality Assurance Staff (LQAS)

Administrator, Accredited Laboratory Program (ALP)

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Email: louis.bluhm@fsis.usda.gov

From: [Duverna, Randolph - FSIS](#)
To: [Domesle, Alexander - ARS](#); [Kunickis, Sheryl - OSEC](#); [Chin, Teung](#); [Abdelmajid, Naser - FSIS](#); [Alexander, Nacola - FSIS](#); [Anthenill, Lucy - FSIS](#); [Arrington, Isabel - FSIS](#); [Basu, Pat - FSIS](#); [Bauer, Nathan - FSIS](#); [Bennett, Patty - FSIS](#); [Bluhm, Louis - FSIS](#); [Bronstein, Philip - FSIS](#); [Casole, Eugene - FSIS](#); [Chittum, Linda - FSIS](#); [Cruickshank, Lynn - FSIS](#); [Dearfield, Kerry - FSIS](#); [Dessai, Uday - FSIS](#); [Disney, Terry - FSIS](#); [Dobson, Ken - FSIS](#); [Dutko, Terry - FSIS](#); [Edelstein, Rachel - FSIS](#); [Esteban, Emilio - FSIS](#); [Flynn, Eric - FSIS](#); [Garrett, Stefanie - FSIS](#); [Glodowske, Angela - FSIS](#); [Goldman, David - Commissioned Corps - FSIS](#); [Hambright, Troy - FSIS](#); [Hess, James - FSIS](#); [Hicks, John - FSIS](#); [Highland, Jennifer - FSIS](#); [Hojjat, Maryam - FSIS](#); [Holland, Kathleen - FSIS](#); [Holt, Kristin - FSIS](#); [Holterman, James - FSIS](#); [Hortert, Larry - FSIS](#); [Hulsey, Laura - FSIS](#); [Johnston, John - FSIS](#); [Kelley, Mike - FSIS](#); [Kishore, Rita - FSIS](#); [LaBarre, Davi - FSIS](#); [Larson, Renee - FSIS](#); [Melita, Paul - FSIS](#); [MunizOrtiz, Jorge - FSIS](#); [Ng, Chilton - FSIS](#); [Nyanzi, Frederick - FSIS](#); [O'Keefe, Margaret - FSIS](#); [Ou, Oliver - FSIS](#); [Pixley, Charles - FSIS](#); [Quinn, Maritza - FSIS](#); [Rentz, Casey - FSIS](#); [Rockwell, Catherine - Commissioned Corps - FSIS](#); [Schulz, Kurt - FSIS](#); [Scifres, Jenny - FSIS](#); [Smith, David - FSIS](#); [Stubban, Milo - FSIS](#); [Tankson, Jeanetta - FSIS](#); [Thaler, Alice - FSIS](#); [Vermeersch, Thomas - FSIS](#); [Yee, Catalina - FSIS](#); [Zipperer, Sam - FSIS](#); [Zukas, Audrius - FSIS](#); [Chawan, Chandramohan - AMS](#); [Haynes, Diana - AMS](#); [Lindsay, James](#); [Lombard, Jason E - APHIS](#); [Reddy, Shanker - AMS](#); [Schroeder, Carl - AMS](#); [Lehotay, Steven](#); [Filloon, Brett - FSIS](#); [Jones, Jonathan M - APHIS](#); ["Amber McCoig"](#); ["Amy Frankshun"](#); ["Andrew Yeung"](#); ["Annamaria Castiglia"](#); [Kim, Anne](#); ["Anthony Adeuya"](#); ["Art Liang"](#); ["Bruce Cooper"](#); ["Cathy Burns"](#); ["Chad Hamel"](#); ["Christine Karbiwnyk"](#); [Olinger, Christine](#); [Hrdy, David](#); ["Eric Nelson"](#); [Liem, Francisca](#); ["George Salem"](#); ["Hiranthi Jayasuriya"](#); [Encarnacion, Ideliz](#); [Sterling, Isaac - AMS](#); ["Jack Lohne"](#); ["Jeffrey Hamer"](#); ["John Sheehan"](#); ["Johnny Braddy"](#); ["Justin Carr"](#); ["Karen Ekelman"](#); [Smith, KerryR - AMS](#); ["Lydia Rosas-Marty"](#); ["Lynn Friedlander"](#); ["Marguerite Pappaioanou"](#); ["Marianne Ross"](#); ["Mark Madson"](#); ["Mary Carson"](#); ["Michael Zimmerman"](#); ["Neal Bataller"](#); ["Pak Chu"](#); ["Patrick Ayres"](#); ["Paul Bachman"](#); ["Paul South"](#); ["Philip Kijak"](#); ["Richard Wang"](#); [Winfield, Sarah](#); ["Selen Stromgren"](#); ["Sherri Turnipseed"](#); ["Stephen Trostle"](#); ["Susan Clark"](#); ["Terry Councell"](#); [Nguyen, Thuy](#); ["Wai Shan So"](#); ["Wendy Andersen"](#); ["Yelena Sapozhnikova"](#); [Hopkins, Yvette](#); ["Sack, Chris A"](#); ["Wang, Richard \(CDC/ONDIEH/NCEH\)"](#); ["Wong, Jon"](#); [Marschman, Brian L - APHIS](#); [Gresham, Tina L - APHIS](#); [Mason, Phillip A - APHIS](#); [Bulluck, Russ - APHIS](#); [McAlpin, Tyler H - APHIS](#); [Rhoads, Matthew A - APHIS](#); [Spaulding, Julie S - APHIS](#); [Caraher, Kai - APHIS](#); [Lanier, William - FSIS](#)
Cc: ["Liang, Arthur P. \(CDC/OID/NCEZID\)"](#)
Subject: IRCG Meeting at USDA/FSIS (PPH1) Dial 1 (b) (6) , Passcode (b) (6)
Attachments: [IRCG AGENDA 12-02-2015.doc](#)
[IRCG Distribution list 102815.doc](#)
[Draft IRCG minutes 28 October 2015.doc](#)

Hello IRCG,

In preparation for the IRCG meeting on Wednesday, December 02, 2015 from 10:00 AM – 12:00 PM (Eastern Time) at FSIS/OPHS, please find the following:

An agenda

A draft of the minutes from the October 28th meeting.

An IRCG distribution list.

Dial-in information can be found below and in subject line. Webinar link is below and in agenda

AGENDA

MINUTES

DISTRIBUTION LIST

DAIL-IN INFORMATION

Dial (b) (6) Passcode (b) (6)

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Washington, DC 20250-3700
Phone: 202-690-6607
Fax: 202-690-6337
Randolph.duverna@fsis.usda.gov

Sent: Tuesday, August 04, 2015 5:46 PM

To: Hrdy, David

Subject: RE: FSIS data format

Importance: High

Hi David,

See attached **Q1, 2015** Residue data for pesticide. If you have any question, please let me know

Thanks

Naser Abdelmajid

USDA/FSIS/OPHS/SciS/RT

Mail Drop: Stop 3777, PP III, 9-227B

1400 Independence Ave, SW

Washington, DC 20250

Office: (202) 690-6492

E-mail: naser.abdelmajid@fsis.usda.gov

From: Hrdy, David [<mailto:Hrdy.David@epa.gov>]

Sent: Wednesday, July 29, 2015 5:28 PM

To: Abdelmajid, Naser - FSIS

Cc: Bennett, Patty - FSIS

Subject: RE: FSIS data format

Thanks Naser.

How/When do we get to take a look at the data?

David

><(((°>`...~`...><(((°> ><(((°>`...~`...><(((°>.

David E. Hrdy

Senior Scientist
CEB/HED/OPP/OCSP
US EPA www.epa.gov/pesticides
Mailcode 7509P
Telephone: 703.305.6990
Fax: 703.305.5147
OFFICE 10248 Potomac Yard 1 (South)

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**From:** Abdelmajid, Naser - FSIS [<mailto:Naser.Abdelmajid@fsis.usda.gov>]

**Sent:** Monday, July 27, 2015 8:47 AM

**To:** Hrdy, David

**Cc:** Bennett, Patty - FSIS

**Subject:** RE: FSIS data format

**Importance:** High

Hi David,

Regarding your request back in June to provide you with the pesticide residue sample results , the FSIS data format contain the following fields:

|                  |
|------------------|
| Animal           |
| NRP Project Code |
| Form ID          |
| Collect Date     |
| Completion Date  |
| Tissue           |
| Compound         |
| Compound Result  |
| Concentration    |
| Units            |

| Analysis Type | Methodology                                 | Findings               | Implications          |
|---------------|---------------------------------------------|------------------------|-----------------------|
| Quantitative  | Surveys, Experiments                        | Statistical Data       | Generalizable Results |
| Qualitative   | Interviews, Focus Groups                    | Thematic Analysis      | Deep Understanding    |
| Mixed Methods | Combination of Quantitative and Qualitative | Comprehensive Insights | Robust Conclusions    |

Please note that multiple residue analytes results ( b/w 75 and 100 ) may be associated with the same sample, hence the resulted file are likely to contain thousands of records/rows. I have Q1 2025 results ready, and working on Q2 2015 results.

Thanks  
Naser

**From:** Abdelmajid, Naser - FSIS  
**Sent:** Wednesday, June 10, 2015 5:38 PM  
**To:** 'Hrdy, David'; Bennett, Patty - FSIS  
**Cc:** Nako, Steve; Crowley, Matthew; Miller, David  
**Subject:** RE: FSIS data format

Hi David,  
Nice chatting with you today as well. 😊

There are some similarities ( and differences ) between the example that you sent (i.e. PDP data ) and the FSIS data. I can send you an FSIS example data before/during your suggested conference call. Please let me know

Thanks  
Naser

**From:** Hrdy, David [<mailto:Hrdy.David@epa.gov>]  
**Sent:** Wednesday, June 10, 2015 4:18 PM  
**To:** Bennett, Patty - FSIS; Abdelmajid, Naser - FSIS  
**Cc:** Nako, Steve; Crowley, Matthew; Miller, David  
**Subject:** FSIS data format

Hi Patty and Naser,

Thank you for the conversation today. I have attached an example of how we would like the data to formatted as well as data dictionary.

Remember, we would like all the data – even those that are “non-detects.”

For the moment if we can start with quarterly data submissions to us that would be great. We can make sure that the data are in good shape and provide any input. This is not likely to last long and we would probably want annual data updates after the first few quarters.

Best,  
David

[illegible]

**David E. Hrdy**  
Senior Scientist  
CEB/HED/OPP/OCSP



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Hi David,
Yes, for Q1-2015 , pesticide results show no-detects only.
Naser

Thank you Naser.

We, Chemistry and Exposure Branch, will review the data format, discuss our review internally here, and get back to you with comments and suggestions.

David



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**From:** Abdelmajid, Naser - FSIS [<mailto:Naser.Abdelmajid@fsis.usda.gov>]  
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Thanks

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How/When do we get to take a look at the data?

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David E. Hrdy

Senior Scientist

CEB/HED/OPP/OCSP

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Sent: Monday, July 27, 2015 8:47 AM

To: Hrды, David

Cc: Bennett, Patty - FSIS

Subject: RE: FSIS data format

Importance: High

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| Animal |
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| Form ID |
| Collect Date |
| Completion Date |
| Tissue |
| Compound |
| Compound Result |
| Concentration |
| Units |
| Analysis Type |

Naser

Naser

David E. Hrdy
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Please note that multiple residue analytes results (b/w 75 and 100) may be associated with the **same sample**, hence the resulted file are likely to contain thousands of records/rows. I have **Q1 2015** results ready, and working on **Q2 2015** results.

Thanks

Naser

From: Abdelmajid, Naser - FSIS

Sent: Wednesday, June 10, 2015 5:38 PM

To: 'Hrdy, David'; Bennett, Patty - FSIS

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Subject: RE: FSIS data format

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Naser

Hi Patty and Naser,

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For the moment if we can start with quarterly data submissions to us that would be great. We can make sure that the data are in good shape and provide any input. This is not likely to last long and we would probably want annual data updates after the first few quarters.

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**From:** [Abdelmajid, Naser - FSIS](#)  
**To:** [Hrdy, David](#)  
**Cc:** [Bennett, Patty - FSIS](#)  
**Subject:** RE: FSIS data format  
**Date:** Monday, July 27, 2015 8:47:39 AM

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There are some similarities ( and differences ) between the example that you sent (i.e. PDP data ) and the FSIS data. I can send you an FSIS example data before/during your suggested conference call. Please let me know

Thanks  
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**Sent:** Wednesday, June 10, 2015 4:18 PM  
**To:** Bennett, Patty - FSIS; Abdelmajid, Naser - FSIS  
**Cc:** Nako, Steve; Crowley, Matthew; Miller, David  
**Subject:** FSIS data format

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**David E. Hrdy**

Senior Scientist

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Naser

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Thanks

Nacer

**From:** Hrdy, David [<mailto:Hrdy.David@epa.gov>]  
**Sent:** Wednesday, June 10, 2015 4:18 PM  
**To:** Bennett, Patty - FSIS; Abdelmajid, Naser - FSIS  
**Cc:** Nako, Steve; Crowley, Matthew; Miller, David  
**Subject:** FSIS data format

Thank you for the conversation today. I have attached an example of how we would like the data to formatted as well as data dictionary.

Remember, we would like all the data – even those that are “non-detects.”

For the moment if we can start with quarterly data submissions to us that would be great. We can make sure that the data are in good shape and provide any input. This is not likely to last long and we would probably want annual data updates after the first few quarters.

Best,  
David

**David E. Hrdy**  
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CEB/HED/OPP/OCSPF  
US EPA [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Mailcode 7509P  
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**From:** [Bluhm, Louis - FSIS](#)  
**To:** [Crowley, Matthew; Pappas, Chris - AMS; Hrdy, David](#)  
**Cc:** [Miller, David; Yee, Catalina - FSIS](#)  
**Subject:** RE: FSIS pesticide update  
**Date:** Monday, January 12, 2015 8:11:53 AM

Knowing this, we in FSIS will not be including ethion dioxon for method validation at this time.

Thanks to all for the follow-up; it is much appreciated. Lou

**Louis Bluhm, Ph.D.**  
Lead Chemist  
Laboratory Quality Assurance Staff (LQAS)  
Administrator, Accredited Laboratory Program (ALP)  
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Email: [louis.bluhm@fsis.usda.gov](mailto:louis.bluhm@fsis.usda.gov)

**From:** Crowley, Matthew [<mailto:Crowley.Matthew@epa.gov>]  
**Sent:** Friday, January 09, 2015 1:55 PM  
**To:** Pappas, Chris - AMS; Hrdy, David; Bluhm, Louis - FSIS  
**Cc:** Miller, David; Yee, Catalina - FSIS  
**Subject:** RE: FSIS pesticide update

Thanks very much for the clarification.

**From:** Pappas, Chris - AMS [<mailto:Chris.Pappas@ams.usda.gov>]  
**Sent:** Friday, January 09, 2015 1:50 PM  
**To:** Crowley, Matthew; Hrdy, David; Bluhm, Louis - FSIS  
**Cc:** Miller, David; Yee, Catalina - FSIS  
**Subject:** RE: FSIS pesticide update

Yes, there would have been a standard available in those years. I'm not sure if it would have been from a commercial source or from the standards repository. Now that all PDP labs are ISO17025 accredited, the focus on valid certified standards is a major issue and they will not use a standard that does not have a valid certificate of analysis from the supplier.

*Chris Pappas*  
Sampling Manager/Chemist  
(202) 572-8173  
[chris.pappas@ams.usda.gov](mailto:chris.pappas@ams.usda.gov)

*"The Power of Science with Quality Service"*

**From:** Crowley, Matthew [<mailto:Crowley.Matthew@epa.gov>]  
**Sent:** Friday, January 09, 2015 1:43 PM  
**To:** Pappas, Chris - AMS; Hrdy, David; Bluhm, Louis - FSIS  
**Cc:** Miller, David; Yee, Catalina - FSIS  
**Subject:** RE: FSIS pesticide update

Thanks for responding Chris.

Just some follow-up: Lou's question pertains to a table that is derived from pesticides that PDP has looked for in the past, ethion di oxon. Here's a copy from a working spreadsheet some PDP data in which ethion di oxon was looked for (though not detected).

| PEST_NAME      | PESTCODE | COMMOD_NAME     | COMMOD | COMMOD_TYPE_DESC | COMMTYPE | YEAR | LOD    | TOTAL | DETECT_BELOW_LOQ | DETECT_ABOVE_LOQ | DETECT_TOTAL |
|----------------|----------|-----------------|--------|------------------|----------|------|--------|-------|------------------|------------------|--------------|
| Ethion di oxon | 538      | Beef Adipose    | BA     | Frozen           | FZ       | 2001 | 0.0058 | 291   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Beef Adipose    | BA     | Frozen           | FZ       | 2002 | 0.0058 | 301   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Beef Liver      | BL     | Frozen           | FZ       | 2001 | 0.0058 | 311   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Beef Liver      | BL     | Frozen           | FZ       | 2002 | 0.0058 | 313   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Beef Muscle     | BM     | Frozen           | FZ       | 2001 | 0.0058 | 309   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Beef Muscle     | BM     | Frozen           | FZ       | 2002 | 0.0058 | 310   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Poultry Adipose | PA     | Frozen           | FZ       | 2000 | 0.0083 | 476   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Poultry Adipose | PA     | Frozen           | FZ       | 2001 | 0.0083 | 155   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Poultry Liver   | PL     | Frozen           | FZ       | 2000 | 0.0083 | 479   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Poultry Liver   | PL     | Frozen           | FZ       | 2001 | 0.0083 | 155   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Poultry Muscle  | PM     | Frozen           | FZ       | 2000 | 0.0083 | 145   | 0                | 0                | 0            |
| Ethion di oxon | 538      | Poultry Muscle  | PM     | Frozen           | FZ       | 2001 | 0.0083 | 154   | 0                | 0                | 0            |

Does this mean that back in 2000-2002 (when these samples are from) there was a standard for ethion di oxon, but now there isn't? Because perhaps the one back then would not be considered reliable anymore? Just trying to reconcile the lack of a standard with apparent previous sampling by PDP.

Thanks,

Matt

**From:** Pappas, Chris - AMS [<mailto:Chris.Pappas@ams.usda.gov>]  
**Sent:** Friday, January 09, 2015 8:51 AM  
**To:** Crowley, Matthew; Hrdy, David; Bluhm, Louis - FSIS  
**Cc:** Miller, David; Yee, Catalina - FSIS  
**Subject:** RE: FSIS pesticide update

Hi all,

I've checked with our PDP labs and they report the same issues in finding a standard for ethion di oxon. I verified with our database and this compound was not reported in 2013 or 2014. The labs can get the parent and the mono oxon metabolite.

*Chris Pappas*  
Sampling Manager/Chemist  
(202) 572-8173  
[chris.pappas@ams.usda.gov](mailto:chris.pappas@ams.usda.gov)

*"The Power of Science with Quality Service"*

**From:** Crowley, Matthew [<mailto:Crowley.Matthew@epa.gov>]  
**Sent:** Thursday, January 08, 2015 9:10 AM  
**To:** Pappas, Chris - AMS; Hrdy, David  
**Cc:** Miller, David  
**Subject:** RE: FSIS pesticide update

Thanks for the quick response. I appreciate you helping us out.

Sounds like you plan to respond to Louis directly (which is fine) – please just copy us on that email.

-Matt

I've asked our labs and heard from some but not all yet. The one's I've heard from either don't test for ethion di oxon, but at least 2 have said they can't get a standard either. I gave the labs to the end of this week to reply, so I'll let Louis know then.

*"The Power of Science with Quality Service"*

Hi Chris,

Just checking in with you on this issue. Hope all's well.

Thanks.

Thanks Chris.

**From:** Pappas, Chris - AMS [<mailto:Chris.Pappas@ams.usda.gov>]  
**Sent:** Friday, December 19, 2014 4:08 PM  
**To:** Crowley, Matthew  
**Cc:** Miller, David; Hrdy, David  
**Subject:** RE: FSIS pesticide update

I'll check with the PDP labs to see if they have it. If they do, I'll find out their source.

*"The Power of Science with Quality Service"*

Hi Chris,

Perhaps you will be able to help us answer a question from a USDA/FSIS colleague regarding an analytic standard for ethion di oxon. See his email below.

I'm coming to you (PDP) since the list he refers to is one we put together for FSIS, but based on pesticides that PDP has looked for in the past (in meat/poultry), ethion di oxon, being one of them.

Any thoughts are appreciated.

Thanks,

Matt Crowley  
EPA/OPP  
703.305.7606

Greetings EPA colleagues,

We in the FSIS labs are continuing to work on expanding our pesticides method to additional analytes. Western Laboratory has completed validation work on their end, and the data is now in LQAS's hands for review. The goal is to have the next method revision in place before April 1. Not only will this method have additional analytes, it will also include catfish muscle. At this time I don't have an update to the table that we discussed back in August, as our review is not completed yet; it is attached for reference. However, I'm optimistic that we will be changing many of the analytes' status from "Validating" to "Yes" once the method is finalized.

One request for you: Western Laboratory has been unable to procure an analytical standard for "ethion di oxon" – apparently neither the EPA pesticide repository nor commercial vendors has it. If you are aware of a viable source for this compound, please let us know, otherwise we will not be able to include it in a future validation of our method.

If you have any questions or need additional information from us, please let us know. Enjoy the holidays!

Thanks, Lou

**Louis Bluhm, Ph.D.**  
Lead Chemist



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Administrator, Accredited Laboratory Program (ALP)  
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**From:** [Bluhm, Louis - FSIS](#)  
**To:** [Esteban, Emilio - FSIS](#)  
**Cc:** [Miller, David](#); [Bennett, Patty - FSIS](#); [MunizOrtiz, Jorge - FSIS](#); [O'Keefe, Margaret - FSIS](#); [Basu, Pat - FSIS](#); [Crowley, Matthew](#); [Hrdy, David](#); [Nako, Steve](#); [Goldman, David - Commissioned Corps - FSIS](#); [Dearfield, Kerry - FSIS](#); [Jordan, William](#)  
**Subject:** Re: FSIS update of EPA OPP table re: FSIS data sharing w/EPA  
**Date:** Wednesday, November 25, 2015 9:14:55 AM

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I agree with Emilio. It would be nice if Pew would share an updated draft version of their report once they incorporate this additional information. Thanks Lou

Louis Bluhm PhD  
Lead Chemist, LQAS  
USDA FSIS

On Nov 25, 2015, at 7:23 AM, Esteban, Emilio - FSIS <[Emilio.Esteban@fsis.usda.gov](mailto:Emilio.Esteban@fsis.usda.gov)> wrote:

I have no problem sharing. Our collaboration is active and successful.

Sent from my iPhone

On Nov 24, 2015, at 18:20, Miller, David <[Miller.DavidJ@epa.gov](mailto:Miller.DavidJ@epa.gov)> wrote:

Hello all,

Does anybody have any concerns with EPA providing the attached priority list (which may not be the latest – we can sent that later) along with the email chain below to Pew? I ask because Pew had requested some documentation about the pesticide prioritization scheme that was worked on jointly by EPA and FSIS. Note that this cooperative work – mostly with all of you -- is described in the GAO Food Safety report beginning on about p. 44

I think the attached and what is below in the email chain helps tell the story of the EPA-FSIS work together on this and illustrates how closely we have communicated and that we took into account and considered a lot of issues. What we worked on and developed involved a considerable amount of thought, with both EPA and USDA trying to optimize what we do to serve each of our respective needs while also recognizing that each party has feasibility and practical “real world” considerations that needed to enter our discussions. Note that in this joint work we were particularly concerned with full and complete documentation in terms of where we obtained the information, why certain choices were made, and how those choices relate to practical concerns. This latter consideration is important so as to avoid the sometimes tendency to “chase zero” that

can happen when communication between the lab that generates the data and the risk assessors and others that use the data is less than sufficient or less than ideal. I think EPA and FSIS succeeded on all counts.

Finally, I will add that this collaborative work with FSIS has been among the productive interagency work I have been involved with in 23 years in government. We learned about each others programs, we communicated about each others needs, and we resolved to get the job done. While we started with FSIS having the capability of detecting only about half (if I recall) of the pesticides we designated as “highest priority” based on historical PDP detects and a number of questions and confusions on LOD and MLA’s etc., we worked through this such that there are now only at most a small handful of pesticides on this highest priority list that it isn’t feasible at present for FSIS labs to look for. We have a lot better understanding of why you have MLA’s and you have tried to reduce those in those instances in which we have emphasize that it is necessary or desirable for better use of the data in risk assessment. And FSIS understands more completely why non-detects are as important as actual detects in our risk assessment process, especially when the associated detection limits can be said to be truly of no risk concern.

Anyway, please let me know if you see a problem with us forwarding the attached and the email chain below to Pew. Pew indicated - several times during the meeting last Friday and also during today’s conference call – that they needed some kind of documentation of our communications on this prioritization and said that past emails between our two Agencies showing this would be sufficient.

David.

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David J. Miller CAPT | USPHS  
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and Acting Chief, Toxicology & Epidemiology Branch  
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703-305-5352 (voice)  
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**From:** Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]  
**Sent:** Wednesday, April 09, 2014 2:55 PM  
**To:** Crowley, Matthew <[Crowley.Matthew@epa.gov](mailto:Crowley.Matthew@epa.gov)>; Miller, David <[Miller.DavidJ@epa.gov](mailto:Miller.DavidJ@epa.gov)>; Hrdy, David <[Hrdy.David@epa.gov](mailto:Hrdy.David@epa.gov)>; Nako, Steve <[Nako.Steve@epa.gov](mailto:Nako.Steve@epa.gov)>  
**Cc:** Esteban, Emilio - FSIS <[Emilio.Esteban@fsis.usda.gov](mailto:Emilio.Esteban@fsis.usda.gov)>; Bennett, Patty - FSIS <[Patty.Bennett@fsis.usda.gov](mailto:Patty.Bennett@fsis.usda.gov)>; MunizOrtiz, Jorge - FSIS <[Jorge.MunizOrtiz@FSIS.USDA.gov](mailto:Jorge.MunizOrtiz@FSIS.USDA.gov)>; O'Keefe, Margaret - FSIS <[Margaret.OKeefe@fsis.usda.gov](mailto:Margaret.OKeefe@fsis.usda.gov)>; Basu, Pat - FSIS <[Pat.Basu@fsis.usda.gov](mailto:Pat.Basu@fsis.usda.gov)>; Hill, Joseph (OPHS) - FSIS <[Joseph.Hill@fsis.usda.gov](mailto:Joseph.Hill@fsis.usda.gov)>  
**Subject:** RE: FSIS update of EPA OPP table re: FSIS data sharing w/EPA

Hi Matt and other EPA friends,

I examined the searchable Excel table to reconcile it with the draft report. The Excel table is very useful; thank you for providing it. (b) (5)

[REDACTED]

The newly-revised EPA table (Word doc) looks nice overall as well. I made a couple of minor edits (changes are tracked) for your consideration, and it is also attached.

Patty: I made one change on page 33 of the draft report to update the analyte count that Emilio had provided. Not sure if it is too late to make this edit to the FSIS response.

Please contact me if there are additional questions or further information is needed – hopefully this meets everyone's timeframe.

Thanks,  
**Lou**

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**From:** Crowley, Matthew [<mailto:Crowley.Matthew@epa.gov>]  
**Sent:** Tuesday, April 08, 2014 1:52 PM  
**To:** Bluhm, Louis - FSIS; Miller, David; Hrdy, David; Nako, Steve  
**Cc:** Esteban, Emilio - FSIS; Bennett, Patty - FSIS; MunizOrtiz, Jorge - FSIS; O'Keefe, Margaret - FSIS; Basu, Pat - FSIS; Hill, Joseph (OPHS) - FSIS  
**Subject:** RE: FSIS update of EPA OPP table re: FSIS data sharing w/EPA

Hi Lou and other FSIS friends,

I've revised the priority list table (see attached) according to our conversation and removed all the "draft" language. In order to add back some columns I revised our previous version using your corrections – so I'd recommend doing some spot-checks to be sure I caught everything and the table is consistent with our notes in the emails below. A few comments:

<!--[if !supportLists]-->• <!--[endif]-->Instead of green font, I added another footnote to the column on FSIS detects, to indicate where you were examining the MLA

<!--[if !supportLists]-->• <!--[endif]-->We've yet to check on the "proposed MLAs", to see if they're adequate for our purposes, but its on our to-do list.

I've also attached a spreadsheet-version of the priority list, which I find to be much easier to navigate. You'll find there are some formatting differences. For example, instead of font colors indicating whether FSIS analyzes for a pesticide, I just have a column with "Yes/No/Yes (proposed)" choices. The same for the "priority level" – it's a choice in a column, rather than a header in a table. And you'll also see some of the columns moved around and headers slightly edited to facilitate a spreadsheet feel.

Finally, we took a shot at re-doing the counts in the GAO report, since that was based on an old version of the priority list. See the attached Word file, pages 30-31 and 35-36. I used the spreadsheet-version since its better for "counting", but I'd recommend double checking my work since I wasn't 100% sure what GAO means by "FSIS's 2013 National Residue Program guidance" (I assumed that corresponded to Yes in the spreadsheet's column C) or what was meant by "Additions to the National Residue Program planned by FSIS for 2014" (I assumed that corresponded to those you were still validating). Unfortunately, I'm not sure which exact version GAO was working off of, so its difficult to know in every instance why the counts are different.

Cheers,

Matt C

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**From:** Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]  
**Sent:** Thursday, April 03, 2014 3:04 PM  
**To:** Crowley, Matthew; Miller, David; Hrdy, David; Nako, Steve  
**Cc:** Esteban, Emilio - FSIS; Bennett, Patty - FSIS; MunizOrtiz, Jorge - FSIS; O'Keefe, Margaret - FSIS; Basu, Pat - FSIS; Hill, Joseph (OPHS) - FSIS  
**Subject:** FW: FSIS update of EPA OPP table re: FSIS data sharing w/EPA

Greetings Matt,

Here are responses to the questions posed. Hopefully they address your needs—please contact me if you require further information.

Thanks, Lou

**Louis Bluhm, Ph.D.**

Lead Chemist

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**From:** Crowley, Matthew [<mailto:Crowley.Matthew@epa.gov>]

**Sent:** Friday, March 28, 2014 1:42 PM

**To:** Bluhm, Louis - FSIS; Miller, David; Hrdy, David; Nako, Steve

**Cc:** Esteban, Emilio - FSIS; Bennett, Patty - FSIS; MunizOrtiz, Jorge - FSIS;

O'Keefe, Margaret - FSIS; Basu, Pat - FSIS; Hill, Joseph (OPHS) - FSIS

**Subject:** RE: FSIS update of EPA OPP table re: FSIS data sharing w/EPA

Hi Lou,

Thanks so much for your input on this table – by the looks of your edits, you really dug into it.

We have some clarifying questions that are listed below. I think after they are addressed we can incorporate your edits/additions in short order and the “priority list” will be in good shape.

<!--[if !supportLists]-->• <!--[endif]-->Is there a reason you wanted to delete the column titled “Proposed for FSIS Residue Monitoring Program (Source FSIS Feb-2013 Presentation)”? Do one of your additional columns better capture the intent of that one? The reason I removed it was to make room for the two additional columns on the right-hand side that I inserted. Since Current MLAs have now been added to the table for all currently-approved analytes (based on your suggestion in the last bullet), in my opinion this column can remain removed from the table.

<!--[if !supportLists]-->• <!--[endif]-->Similarly it appears that you deleted the column on “direct animal use”. Did you/do you think that should be deleted or are you OK adding that back in (or me

adding it back in)?

Same reason for removal as above—it was taken out only to make room for the two additional columns. Feel free to restore this one as you see fit. I used the LQAS-modified table to discuss with FSIS WL personnel, so for the lab's needs we did not need the “direct animal use” column.

<!--[if !supportLists]-->• <!--[endif]-->Regarding permethrin cis&trans, we marked those as being analyzed by FSIS from two sources: a) a 2013 .ppt file – attached – see slide 16 and b) [http://www.fsis.usda.gov/shared/PDF/CLG\\_PST\\_5\\_01.pdf](http://www.fsis.usda.gov/shared/PDF/CLG_PST_5_01.pdf) - see page 18 of 48. I'm not disputing your judgment, just pointing out where/why we marked those that way.

Understood. The reason we had changed it was because we noticed that permethrin total vs. permethrin cis and trans as individual isomers were categorized separately in the table, with one (permethrin total) being in the “highest priority” section compared to permethrin cis and trans being in the “high priority” section. According to WL, the PST5 method does not distinguish between the two isomers—the standard is for permethrin cis and trans combined. I had made the assumption that permethrin total is the same as permethrin cis and trans combined. If that assumption is incorrect, please let me know. Also, we will further clarify in the PST5 method that permethrin is being analyzed as the two isomers combined when we add the additional compounds undergoing validation right now.

<!--[if !supportLists]-->• <!--[endif]-->Clothianidin and “validating” – can you provide a source? I guess what I mean is that the column in which “validating” now appears for clothianidin cites a .pdf document that doesn't include clothianidin. Clothianidin is also not referenced in the (attached) .ppt file. If the source is simply “Lou Bluhm telling EPA”, that's fine, we would just update footnote E to say that that column is based on that .pdf and “communication with FSIS staff”. Please add “communication with FSIS staff.” Clothianidin was added later in the process, after these references were created.

<!--[if !supportLists]-->• <!--[endif]-->Propachlor and nonachlor-cis: yes, it looks like based on the .ppt file we should have marked those as validating (slide 16). OK. The attached table has been updated to reflect these changes without strikethroughs.

<!--[if !supportLists]-->• <!--[endif]-->Can you provide a link for “the current version of CLG-PST5, which is available on the public FSIS website”.? We'd probably add that to the appropriate footnote as a reference.

Here is the link from the public FSIS website:

<http://www.fsis.usda.gov/wps/wcm/connect/499a8e9e-49bd-480a-b8b6-d1867f96c39d/CLG-PST5.pdf?MOD=AJPERES>

The most current method version is CLG-PST5.03.

<!--[if !supportLists]-->o <!--[endif]-->Regarding “FSIS would appreciate EPA input on whether or not these MLA values are suitable for PDP purposes” – we’ll have to look deeper into that and get back to you.

That would be great, thank you.

<!--[if !supportLists]-->• <!--[endif]-->Is there a reference that we can include for the column “Proposed MLA for Analytes in the Extension (ppb)” – as in, were those already planned and documented somewhere or are they just an outcome of our conversations here?

We have an internal table that reflects the levels assessed during validation—this is what was used to provide these values to the EPA table. We can share it, with the understanding that it is a Draft and not finalized yet (hence the “Proposed” header). The reason for this is that we are not yet certain that all compounds will be included in the method – this might also lead to some of the compounds which originally passed validation and are currently in the method to be removed. As you can imagine, the data is complex to review, but we are working diligently on this project and will provide an update once a final determination on data suitability for each analyte has been made.

<!--[if !supportLists]-->• <!--[endif]-->You’ve added a “Current MLA” column – does it make sense to fill out the current MLAs for all of the (FSIS) “Yes’s”? Is that something you can do?

Yes it does make sense, and it is done (see attached table). The values come from the current PST5 method, available via the link above. If any of these questions are confusing and more easily resolved via phone don’t hesitate to call.

Thanks,

Matt Crowley  
703.305.7606

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**From:** Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]  
**Sent:** Tuesday, March 25, 2014 4:06 PM  
**To:** Miller, David; Hrdy, David; Nako, Steve; Crowley, Matthew  
**Cc:** Esteban, Emilio - FSIS; Bennett, Patty - FSIS; MunizOrtiz, Jorge - FSIS; O’Keefe, Margaret - FSIS; Basu, Pat - FSIS; Hill, Joseph (OPHS) - FSIS  
**Subject:** FSIS update of EPA OPP table re: FSIS data sharing w/EPA

Greetings everyone,

Attached is a LQAS-modified version of the EPA table delineating pesticides of interest. It is intended to show where progress is being made by WL and LQAS regarding extension of the existing FSIS pesticide



method (CLG-PST5) to additional pesticides.

We in WL and LQAS did make some corrections to the table:

(b) (5)

Also, WL appreciates receiving the EPA MRL spreadsheet shared earlier, and the lab would like to use it as a tool to ensure that FSIS reporting of pesticide results reflects current tolerances. How often is that

spreadsheet updated, and would EPA recommend that FSIS use it in this manner?

Thank you for the opportunity to contribute,  
Lou

**Louis Bluhm, Ph.D.**

Lead Chemist

Laboratory Quality Assurance Staff (LQAS)

Administrator, Accredited Laboratory Program (ALP)

USDA FSIS OPHS

950 College Station Rd., Athens, GA 30605

Phone: 706-546-2359

Fax: 706-546-3453

Email: [louis.bluhm@fsis.usda.gov](mailto:louis.bluhm@fsis.usda.gov)

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**From:** Miller, David [<mailto:Miller.DavidJ@epa.gov>]

**Sent:** Wednesday, March 19, 2014 9:00 AM

**To:** Bennett, Patty - FSIS; Esteban, Emilio - FSIS; Hill, Joseph (OPHS) - FSIS; Basu, Pat - FSIS; Kim, Anne - FSIS; MunizOrtiz, Jorge - FSIS; O'Keefe, Margaret - FSIS

**Cc:** Nako, Steve; Hrdy, David; Crowley, Matthew; Housenger, Jack; Schneider, Bernard A.; Schneider, Bernard - ARS

**Subject:** RE: FSIS data sharing w/EPA

Hello All,

Since many of the action item issues from our meeting in mid February are lab-related, the meeting invite tomorrow has been culled to include mainly the laboratory principals.

In preparation for that meeting, I have included in **redline bold** below our OPP responses to those items that were OPP-focused and for which we had responsibility for addressing.

I also attach something I sent earlier (separately) from Bryant Christies' [MRLDatabase.com](http://MRLDatabase.com). Note that GAO's Ross Highsmith had requested this several weeks back from the B-C as well. This is an excellent resource for determining what US tolerances exist on what animal commodities. While the eCFR is great for individual chemicals and the definitive source for this kind of information, it is difficult at best to navigate if one deviates from the standard chemical-based query and wishes to reverse or sideways searching. The Excel spreadsheet above is excellent for that and is the only complete, easy to use, and up to date source

I know of for this.

David.

---

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**From:** Miller, David

**Sent:** Tuesday, February 11, 2014 12:41 PM

**To:** Miller, David; 'Bennett, Patty - FSIS'; 'Esteban, Emilio - FSIS'; 'Hill, Joseph (OPHS) - FSIS'; 'Basu, Pat - FSIS'; 'Kim, Anne - FSIS'; 'MunizOrtiz, Jorge - FSIS'; 'O'Keefe, Margaret - FSIS'

**Cc:** Nako, Steve; Hrdy, David; Crowley, Matthew; Housenger, Jack; Schneider, Bernard A.; Schneider, Bernard - ARS

**Subject:** RE: FSIS data sharing w/EPA

Hello all,

As previously indicated, please find the list of issues and follow up items that we recorded during our meeting last week on the white pad. We had talked about having a follow-up conference call later this month (toward the end) to discuss these, the timeline for completion, and generally see where we are at in the follow-through process. I will see about getting something set up.

Also, we have made what I consider EPA's final edits to the MOU, removing obvious items that are no longer applicable (e.g, PDP no longer samples drinking water and the PDP Microbiological Sampling Program is now defunct) or things that are likely to cause problems (e.g, nobody can say definitively whether that FDA action levels are still in existence). My rule of thumb at this point is remove anything in the agreement that will delay things and that we can remain silent on. I will be sending that along shortly.

So, here is the list we developed last week on to-do and action times.

<!--[if !supportLists]-->1. <!--[endif]-->Black to Red

We have used the PDP analyte list as our “universe” listed those pesticides for which BOTH PDP and FSIS looks for in red and those for which only PDP looks for in black. Please verify that those in red are indeed included in FSIS analyte suite and those in black are not

<!--[if !supportLists]-->2. <!--[endif]-->Rationale for eliminating if not found in many years of looking – check PDP

We believe that if FSIS has not found a given pesticide at a sufficiently low LOD for many years, it is not unreasonable - given resource constraints – for FSIS to discontinue (or to have discontinued) looking for it as long as PDP has not detected it either. FSIS will decide and provide rationale for which “blacks” in the Group 2, 3, and 4 pesticide priority might actually not be worth again including in the FSIS analyte suite based on the past history new information, and/or historical results.

<!--[if !supportLists]-->3. <!--[endif]-->Check MLA as percent of tolerance (\* and \*\* and \*\*\*)

FSIS will further investigate the MLA’s in the MLA’s as a percent of tolerance column (column 6) in the Priority Pesticide list and determine for which ones MLAs might be able to be reduced. Also, MLAs will need to be considered for pesticides for which FSIS looks for but were not provided in the “FY2013” list because that list was only detected compounds. For example, FSIS looks for cyfluthrin (a “red font” pesticide), but the tolerance to MLA ratio is not listed because cyfluthrin was not detected in FY2013, thus the MLA was not available for that analysis.”

<!--[if !supportLists]-->4. <!--[endif]-->Check MLA as percent of aPAD (\* and \*\* and \*\*\*) ) [note G]

FSIS will further investigate the MLA’s in the MLA’s as a percent of aPAD column (column 7) in the Priority Pesticide list and determine for which ones MLAs might be able to be reduced. Also, MLAs will need to be considered for pesticides for which FSIS looks for but were not provided in the “FY2013” list because that list was only detected

compounds. For example, FSIS looks for cyfluthrin (a “red font” pesticide), but the CS-MLA-aPAD analysis was not done because cyfluthrin was not detected in FY2013, thus the MLA was not available for that analysis.

<!--[if !supportLists]-->5. <!--[endif]-->MLA – uncertainty issues – can we live with more, so MLA can go down (e.g, % recovery, reliability, repeatability)

Currently, FSIS has a number of quality criteria with respect to recovery, reliability, repeatability in terms of defining MLA’s. It may be that MLAs may be able to be reduced if OPP is comfortable in relaxing those criteria. For example, OPP guidelines usually desire method recoveries in spiked samples be 70-120% for a method to be deemed adequate, but can make exceptions (particularly if recoveries are in the 50-70% range and are consistent). For those issues identified through (3) and (4) above, FSIS will consider “relaxing” the QA/QC criteria in consultation with OPP in order to determine if MLA’s can be lowered for the purposes of OPP risk assessments.

<!--[if !supportLists]-->⇒ <!--[endif]--> **FSIS should consider relaxing it’s recovery/reliability criteria used to estimate its MLAs to match those of EPA’s Office of Pesticide Programs criteria of 70-120%. This should be done particularly where the MLA’s are at a level which in and of themselves are responsible for more than a negligible contribution to risk as indicated in the priority spreadsheet as asterisks in the column relating to MLA as a percent of aPAD. Similar, those MLAs that a substantial fraction of the tolerance should also be reconsidered as per the 70-120% recovery criteria.**

<!--[if !supportLists]-->6. <!--[endif]-->What pesticides is FSIS looking for but NEVER found (e.g, DDT)

I wasn’t sure that I got this one right in my notes. FSIS never found DDT? Or was it just the parent they never found and DDE and other DDT metabolites were found. In any case, OPP thinks that a list of pesticides which FSIS had not found in repeated samplings over the years would be useful.

<!--[if !supportLists]-->7. <!--[endif]-->Check Direct animal use

Can FSIS verify that there are no obvious errors in our direct animal use classification? These were developed from a database in which

this information may not be necessarily completely up to date. We think that you folks might have at least as good a sense of what's happening in terms of treatments as our database. So it would be appreciated if you could check

<!--[if !supportLists]-->8. <!--[endif]-->Import tolerances/ legacy pesticides/action levels

Further conversations on import tolerances, legacy pesticide, and action levels (and what they mean) are warranted. We will follow up on this and the Circle of Poison paper later. BEAD's Diann Sims and Sepehr were two folks in OPP's BEAD that worked on this along with Jack Housenger. Recall that [MRLdatabase.com](http://MRLdatabase.com) (which we introduced in January to Jorge M-O, Ann Kim, and Meg does have tolerances for domestically registered pesticides for which overseas tolerances exist (also, Codex).

<!--[if !supportLists]-->⇒ <!--[endif]-->**David H. has contacted BEAD and others on this and has gathered material that we can send later. I don't want to send it now since I don't want it to interfere with other GAO-based priorities. We might want to discuss this a bit as part of a pre-GAO exit conference as it is possible that GAO will bring this up as part of its exit conference (e.g., "What is FSIS doing with respect to looking at pesticides that may be used overseas and are not looked for as part of their analytical suite?"). "What livestock use pesticides that are illegal for use in the US but are exported overseas and may be used on animals that are subsequently imported to the U.S?"). As far as I can tell, this hasn't been raised by GAO as part of the current GAO inquiry, so it may not happen.**

<!--[if !supportLists]-->9. <!--[endif]-->Zero tolerance (eg, based on FDA LOD) vs. no tolerance vs. exemption

There are some tolerances listed on the CFR for which a tolerance of "0" is listed. FSIS wondered how these should be treated for enforcement and other purposes and how it might be different from the complete absence of a listing for a given slaughter class/pesticide –does that absence not also signify a zero tolerance?

Here's what the CFR says about a "zero tolerance" (from B. Schneider)

40 PROTECTION OF ENVIRONMENT111996-07-011996-07-01false180.5Sec. 180.5PROTECTION OF ENVIRONMENTENVIRONMENTAL PROTECTION AGENCY-- (Continued)PESTICIDE PROGRAMSTOLERANCES AND

EXEMPTIONS FROM TOLERANCES FOR PESTICIDE  
CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES

Definitions and Interpretative Regulations  
Sec. 180.5 Zero tolerances.

A zero tolerance means that no amount of the pesticide chemical may remain on the raw agricultural commodity when it is offered for shipment. A zero tolerance for a pesticide chemical in or on a raw agricultural commodity may be established because, among other reasons:

(a) A safe level of the pesticide chemical in the diet of two different species of warm-blooded animals has not been reliably determined.

(b) The chemical is carcinogenic to or has other alarming physiological effects upon one or more of the species of the test animals used, when fed in the diet of such animals.

(c) The pesticide chemical is toxic, but is normally used at times when, or in such manner that, fruit, vegetables, or other raw agricultural commodities will not bear or contain it.

(d) All residue of the pesticide chemical is normally removed through good agricultural practice such as washing or brushing or through weathering or other changes in the chemical itself, prior to introduction of the raw agricultural commodity into interstate commerce.

Bernie has indicted that of the 33,159 tolerances (as of 5/14/13), 37 are “zero tolerances”. I think these are likely antiquated, since I am not familiar with any zero tolerances currently being affirmatively established. Our current practice: the absence of a tolerance means that no residue is allowed to be found or the commodity is subject to seizure. It is, of course, up to the enforcement agency (typically FDA or USDA) to determine at what level they choose to enforce. We understand that FDA has a at least an informal threshold level of 0.01 ppm. In addition, I would suspect in any case that an enforcement agency would not choose to take any action at concentrations below the method’s demonstrated LOD.

It’s not clear to me that the zero tolerances are not mistakes we made eons ago. In any case they are likely antiquated, and they essentially mean the same thing as if they weren’t listed at all. In any case,

<!--[if !supportLists]-->10. <!--[endif]-->Fat not being done – but a while back perhaps?

Our understanding is that the FY 2013 data provided to us by FSIS are all muscle samples. We further understand that fat is not currently routinely being analyzed by FSIS (meat contains fat). FSIS does have some fat samples, and FSIS will check back to see what pesticides were being seen in fat. We will need to think about here what we will enter as concentrations in fat. Perhaps we can assume that the concentration in meat is equal to that in fat. This could be an systematic underestimate of concentration and thus exposure, which we generally don't like to do. Alternatively, we could try to bound it or take Kow into account. In any case, I suspect that there would be a minimal effect on dietary exposure.

<!--[if !supportLists]-->⇒ <!--[endif]--> **OPP will deal with this later on its own, and we are sure we can figure this out and in a way that is reasonable for dietary assessment.**

<!--[if !supportLists]-->11. <!--[endif]-->How do we feel about dropping the Low (Priority 4) chemicals – if something has to give?

If something has to give based on resource constraints, it would be best for OPP and FSIS to discuss the particular circumstances. But, all else being equal, the Priority 4 pesticides – particularly those with no direct animal use, those which have not been detected before by FSIS, and those with low acute, chronic, or cancer toxicity - are likely those that are most able to be dropped. Again, however, we would suggest that this be done collaboratively, and on a case-by-case basis.

<!--[if !supportLists]-->⇒ <!--[endif]-->**Agree.  
Collaboratively and on a case-by-case basis.**

<!--[if !supportLists]-->12. <!--[endif]-->Need to meet on Bernie's Table 1 and PBPK , animal diets, etc.

This is something we in OPP can arrange.

<!--[if !supportLists]-->⇒ <!--[endif]--> **I understand that David Hrdy is making arrangements with LT Munoz-Ortiz and others to come here in early to mid-April for a session to be led by OPP's Mike Doherty/Bernie Schneider on how OPP constructs reasonable animal diets for estimating exposures.**



<!--[if !supportLists]-->13. <!--[endif]-->Get list of PDP chemicals , CAS No., and/or standard reporting numbers for FSIS.

We can provide FSIS a list of PDP chemicals and PDP identifying numbers for FSIS and FSIS can add it their numbers. Although CAS numbers can be difficult to use, we can also provide this. We may want to provide a list of our PC codes as well at a later date. Steve Nako has assembled a file containing these chemicals, PDP ID codes, tolerances, etc. , and I have attached the zipped file to this email.

<!--[if !supportLists]-->14. <!--[endif]-->Who to contact in OPPT for chemical emergency situations (now, contacting ATSDR)  
For non-pesticide issues, ATSDR may be the best contact, but Ann Kim might know. We will further check into this. Presumably, this is based on a desire for tox information or any other current info that may be of relevance to an emergency situation.

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**From:** Miller, David

**Sent:** Thursday, February 06, 2014 9:29 PM

**To:** 'Bennett, Patty - FSIS'; 'Esteban, Emilio - FSIS'; 'Hill, Joseph (OPHS) - FSIS'; 'Basu, Pat - FSIS'; 'Kim, Anne - FSIS'; MunizOrtiz, Jorge - FSIS; O'Keefe, Margaret - FSIS

**Cc:** Nako, Steve; Hrdy, David; Crowley, Matthew

**Subject:** RE: FSIS data sharing w/EPA

Thanks, all, for coming over here for the meeting. I thought we got a lot done and it brought home just how far we've progressed.

I have my scribbled list of action and follow-up items from the meeting, and will be sending these out to you all on Monday.

David.

---

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**From:** Miller, David  
**Sent:** Thursday, January 30, 2014 4:58 PM  
**To:** 'Bennett, Patty - FSIS'; Esteban, Emilio - FSIS; Hill, Joseph (OPHS) - FSIS; '[basu.pat@fsis.usda.gov](mailto:basu.pat@fsis.usda.gov)'  
**Cc:** Nako, Steve; Hrdy, David; Crowley, Matthew; Housenger, Jack  
**Subject:** FW: FSIS data sharing w/EPA

Patty, Emilio, Joseph, and Pat,

We are looking forward to meeting with you next Wednesday morning, and will shortly (tomorrow) be sending out a draft agenda for your review/comment. The agenda will include some statement as to what we see as expected outcomes of the meeting and what we hope to be the final road map to closing this work effort out. I think, coincidentally, it will set us up nicely for the GAO audit with I hope at least some if not many GAO concerns addressed in such a way that highlights the cooperative work that has been ongoing between EPA/OPP and USDA/FSIS.

In the meantime, I attach here what we consider to be a pretty close to final version of our priority list (aka "Aaron's Priority List"). We had earlier been focusing on additions to the table that would allow us to better understand both USDA/FSIS laboratory capabilities and EPA needs with respect to risk assessment and making the best use of the data. Your providing the analytical method during our last face-to-face meeting at FSIS HQ as well as our comparison of your method MLA's to our tolerances and to our toxicological endpoints was very useful. We recently completed this (and reviewed it with Jorge, Kim, et al. when they visited us) and subsequently began QA/QC of our work. I will note that this QA/QC resulted in our adding about 30 pesticides to the list that PDP looked for but we did not list that way in earlier versions. Most of these were in the lower priority categories and FSIS is already looking for a number of them, so this isn't a big change from what we had provided to you before as working drafts. But I wanted to let you know that and to let you know that this is the Priority List we will be working from next week. If there are things that seem strange or incorrect to you are not in accordance with your understanding of things, please let us know.

I think the overall objective of Wednesday's meeting will be next and final steps to reach resolution of which analytes FSIS will evaluate as to feasibility of including in their testing program. In addition, discussions should include those pesticides for which the FSIS MLAs might be problematic (too high) for us to comfortably use in our risk assessments (there aren't many, and it may be that the MLA's cited are for other animal tissues). We should also include discussion of the 15 questions below – Emilio had provided responses that I think address most of our thoughts, so this may go pretty fast. But it would be nice to close these

out. And discussion should include what needs to happen for FSIS to begin providing us with this residue data on a routine basis and the conditions they may have on release. The ultimate aim, I think, is to make it such that both FSIS and OPP are doing as much as is reasonably feasible given constrained resources to look for the right things at the right concentrations. And that the desirable end product of this is an assurance that both FSIS and EPA are working collaboratively to ensure a safe food supply with respect to pesticide exposures.

I am looking forward to the meeting.

David.

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David J. Miller CAPT | USPHS

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**From:** Bennett, Patty - FSIS [<mailto:Patty.Bennett@fsis.usda.gov>]  
**Sent:** Wednesday, December 18, 2013 7:49 AM  
**To:** Miller, David; Hrды, David  
**Cc:** Esteban, Emilio - FSIS; Hill, Joseph (OPHS) - FSIS; Bennett, Patty - FSIS  
**Subject:** FW: FSIS data sharing w/EPA

Hi David – Emilio provided responses below to some of your earlier statements –

We are very much interested in a 2<sup>nd</sup> meeting – perhaps we can schedule something after 14 January – are there better days than others relative to meeting load or travel plans? If you can throw out some dates, I will set up a meeting -

p

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Dear Emilio and Patty and Joseph

Thank you very much for allowing us to review a sample data package, and, again, apologies for my delay in getting back to you. We have been reviewing it here and have a number of thoughts/questions which we hope you can address or clarify:

<!--[if !supportLists]-->(1) <!--[endif]-->We note that the figures in the column labeled “MLA (ppb)” are often substantially higher than those in the column labeled “amount (ppb)”. **This was our objective. We avoid “chasing zero” as there is no need.** We are not sure what this means or how to interpret this. If the MLA is thought of as a kind of administrative LOQ, then in many cases these are higher – and in some cases substantially – than the amount detected. **Correct. The MLA is simply a comfortable level we could find and quantify the compound.** As our typical practice is to use the detects and assume ½ LOD for all non-detects, it seems that the ‘non-detects’ will have higher values than our detects. And this presents a bit of a dilemma for us. **Yes, we have a fundamental difference in approaches. To follow your practice we would have to document an LOD which we have purposely avoided because there are huge matrix effects and we would end up with individual LOD for every tissue, slaughter class, and compound combination. The MLA was purposely defined as a lowest possible denominator that would cover all tissues and all slaughter classes.**

<!--[if !supportLists]-->(2) <!--[endif]--> We don’t see that there is any indication of the number of non-detects (samples that were taken, but for which nothing was found) – presumably, any final data set provided to us would contain this information for EACH sample that is taken. **Yes, denominators would be provided.** The not detects are as important to us in risk assessment as the detects;

<!--[if !supportLists]-->(3) <!--[endif]--> It would be good to know what pesticides you are NOT detecting and the associated LODs; presumably, this would be provided to us either as a separate list or as part of (2), above. Again, we have chosen not to define LODs because of the multiplicity of tissues and slaughter classes. Perhaps we could consider doing LOD work on a select group of compounds that are of critical importance.

<!--[if !supportLists]-->(4) <!--[endif]--> It would be good to we know if what you are seeing in terms of pesticides are the those that would be predicted based on Aaron's prioritization list; similarly, are the things you are looking for but NOT seeing also those that would be predicted to be this way (i.e., the low priorities) on Aaron's list as well. Concordance between what you look for and see/ look for and don't see and Aaron's prioritization list would help to validate our initial thoughts on what should and should not be there.

<!--[if !supportLists]-->(5) <!--[endif]--> It would be useful for us to have any data submitted to us using a consistent name for commodity as well as a consistent name for pesticide. Problems have arisen when there are slight changes in the names such that filtering with Excel won't capture all the data. If, for example there is an extra space in some of the results for "Cyhalothrin- L" versus "Cyhalothrin-L", that would cause problems. Agreed we will improve on data nomenclature. We have the same experience with naming serotypes of Salmonella. May use pick from dropdown menus to avoid typing.

<!--[if !supportLists]-->(6) <!--[endif]--> Re: Column 1, "Received Date" : can we also have sample collection date? Or can you say, definitively, the received date imply that the sample was probably taken with the last few days and had been handled appropriately during shipment and storage? We can provide both collection, receipt and analysis dates.

<!--[if !supportLists]-->(7) <!--[endif]--> Re: Column 2, "Sample ID #" : is this a unique identifier that will not be used again over the years or only within the year? Correct. Each identifier is unique. That has been a problem in the past with PDP in that SampleID numbers repeated, so we needed to be aware of that and concatenate strings to avoid that. Does your SampleID have any systematic meaning coded into the number? for example does it indicate which lab analyzed the sample? Or where it was

taken from? Only WL tests for pesticides and the location (state or region) of the slaughter plant is available.

<!--[if !supportLists]-->(8) <!--[endif]-->Re: Column 3, "Form #" :  
What does this mean? Is this a sampler (inspector) form, a lab form, or a production form? The FSIS sample collection number. This datum follows the sample through the entire process. It's a number and a barcode we scan into our LIMS at every step in the reporting.

<!--[if !supportLists]-->(9) <!--[endif]-->Re: Column 4, "Production Class": We can use the red book for these terms unless there are departures or unique terms not there. Can you provide additional information on the portion of the animal (e.g, liver, muscle, kidney, fat, etc...); that seemed to be missing and is something that is important to us. Production class is defined in blue or red book and have not changes in many years. All tissue we are currently testing is muscle, but were we to change, we do have individual identifiers for muscle, kidney, liver, fat, etc.

<!--[if !supportLists]-->(10) <!--[endif]-->Re: Column 5,  
"Establishment": Are these codes only known to your labs? They are part of our Agency identifiers and we usually do not ever use them outside the Agency to protect the establishment. Are there reasons that we might even want to keep them off the public data release? We do not release those identifiers. We really don't see a need for our receiving this, unless you are very comfortable with this information being made public. Presumably, the samples are representative and thus self-weighting (e.,g probability proportional to size sampling) within the production class. We will not share in the future.

<!--[if !supportLists]-->(11) <!--[endif]-->Re: Column 6, "State": Is this the state that the slaughter is in or the state that the animal was last being raised? Location of the processing establishment.

<!--[if !supportLists]-->(12) <!--[endif]-->Re: Column 7 "District": Is this one of these FSIS districts "Alameda, CA; Albany, NY; Atlanta, GA; Beltsville, MD; Chicago, IL; Dallas, TX; Denver, CO; Des Moines, IA; Jackson, MS; Lawrence, KS; Madison, WI; Minneapolis, MN; Philadelphia, PA; Raleigh, NC; and Springdale, AR" or does district mean something else? Agency has 10 inspection districts and districts may cover several states. We could capture data at the circuit level (many circuits in one district). Would it be county level? This might be useful to us, as long as it does not cause you

concerns? The most refined data we usually share outside the Agency is at the region, state, or District level. Rarely do we go below region. Are there a sufficient number of slaughter sites within a district such that knowing the district would not indicate the facility. Yes, every District has more than one state. Perhaps it's best if we report by State. That seems to be a common identifier.

<!--[if !supportLists]-->(13)<!--[endif]-->Re: Column 8, "Compound": What else is being screened? What about metabolites? The published method identifies the individual target that is being measured. Also- see above on being consistent with naming or include a second column using PDP codes (or your own codes, if you use them) to help avoid data problems. We could do a side by side with your nomenclature and strive for adopting your names for consistency purposes.

<!--[if !supportLists]-->(14)<!--[endif]-->Re: Column 9, "Amount (ppb)": Is the residue amount result for that sample? Or is it a method LOD, LOQ or something similar? The amount is the estimate of the concentration of the compound in the tissue we tested.

<!--[if !supportLists]-->(15)<!--[endif]-->Re: Column 10, "MLA (ppb)": could you please add additional information about this (and, in particular, why this is often times substantially greater than the "Amount" ? This puzzles us. To the extent that the MLA is something like an LOQ or LOD (or, essentially, saying that nothing was detected at that level or above), we would typically use half of that for the ND's our risk assessments, and I wonder what that would do for our risk assessment. It would be a bit nonsensical in those cases where the actual FSIS detect is lower than the MLA. We can discuss the MLA situation in detail better in a conference call. We understand your concern and may find a common ground we can both operate.

I note that as one of our follow-on activities, David H. is checking the MLA's for some specific chemicals to see if - in and of themselves - these concentrations (or, more specifically half those levels) would cause risk concerns in that a substantial fraction (e.g., 10%) of the risk cup was filled, potentially crowding out other ag uses. Our initial and (still) very preliminary thinking is that if the MLA's cause less than 1% of the allowable exposure level to be occupied, that would be no problem. Between 1% and 10% : we might have concerns with such "crowding out"

of other uses. And greater than 10%: we might very well have concerns that these meat/poultry/pork commodities would be incorrectly (in what is likely to be all cases) identified and one of the bigger contributors to risk. We should have these answers to you in time for our next conversation.

We have contacted our AA's office regarding the signing of the MOU, and folks have agreed that it should be at the level of our Assistant Administrator, Jim Jones. Jim Jones' office has asked for a brief one-pager on this which David H. is preparing. I'd like to think that we'd be able to get this done in January.

Again, thanks very much for the work you all have put into this. I think between Aaron's prioritization list that you all have, the answers to the questions above, and what David H. generates regarding the MLA's, we should be able to resume our very fruitful conversations shortly.

David.

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**From:** Bennett, Patty - FSIS [<mailto:Patty.Bennett@fsis.usda.gov>]  
**Sent:** Tuesday, November 19, 2013 2:51 PM  
**To:** Miller, David; Hrdy, David  
**Cc:** Esteban, Emilio - FSIS; Hill, Joseph (OPHS) - FSIS; Bennett, Patty - FSIS  
**Subject:** FSIS data sharing w/EPA

Hi – Emilio would like to start our conversation off with your review of this data set –

Thinking about everyone's schedule – perhaps the 1<sup>st</sup> week in December for a meeting?

P. Bennett, DVM, MS, DACVPM, MPP  
Deputy Director, Science Staff



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**From:** Esteban, Emilio - FSIS  
**Sent:** Tuesday, November 05, 2013 7:16 AM  
**To:** Bennett, Patty - FSIS  
**Subject:** hola from the south

*Emilio Esteban, DVM, MBA, MPVM, PhD  
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<PDP Residue Priority List\_4-8-14 (LQAS 4-9-14).docx>

**From:** [Duverna, Randolph - FSIS](#)  
**To:** [Jones, Jonathan M - APHIS](#); [Marschman, Brian L - APHIS](#); [Abdelmajid, Naser - FSIS](#); [Alexander, Nacola - FSIS](#); [Anthenill, Lucy - FSIS](#); [Arrington, Isabel - FSIS](#); [Basu, Pat - FSIS](#); [Bauer, Nathan - FSIS](#); [Bennett, Patty - FSIS](#); [Bluhm, Louis - FSIS](#); [Bronstein, Philip - FSIS](#); [Casole, Eugene - FSIS](#); [Chittum, Linda - FSIS](#); [Cruickshank, Lynn - FSIS](#); [Dearfield, Kerry - FSIS](#); [Dessai, Uday - FSIS](#); [Disney, Terry - FSIS](#); [Dobson, Ken - FSIS](#); [Dutko, Terry - FSIS](#); [Edelstein, Rachel - FSIS](#); [Esteban, Emilio - FSIS](#); [Flynn, Eric - FSIS](#); [Garrett, Stefanie - FSIS](#); [Glodowske, Angela - FSIS](#); [Goldman, David - Commissioned Corps - FSIS](#); [Hambright, Troy - FSIS](#); [Hess, James - FSIS](#); [Hicks, John - FSIS](#); [Highland, Jennifer - FSIS](#); [Hojjat, Maryam - FSIS](#); [Holland, Kathleen - FSIS](#); [Holt, Kristin - FSIS](#); [Holterman, James - FSIS](#); [Hortert, Larry - FSIS](#); [Hulsey, Laura - FSIS](#); [Johnston, John - FSIS](#); [Kelley, Mike - FSIS](#); [Kishore, Rita - FSIS](#); [LaBarre, Davi - FSIS](#); [Larson, Renee - FSIS](#); [Melita, Paul - FSIS](#); [MunizOrtiz, Jorge - FSIS](#); [Ng, Chilton - FSIS](#); [Nyanzi, Frederick - FSIS](#); [O'Keefe, Margaret - FSIS](#); [Ou, Oliver - FSIS](#); [Pixley, Charles - FSIS](#); [Quinn, Maritza - FSIS](#); [Rentz, Casey - FSIS](#); [Rockwell, Catherine - Commissioned Corps - FSIS](#); [Schulz, Kurt - FSIS](#); [Scifres, Jenny - FSIS](#); [Smith, David - FSIS](#); [Stubban, Milo - FSIS](#); [Tankson, Jeanetta - FSIS](#); [Thaler, Alice - FSIS](#); [Vermeersch, Thomas - FSIS](#); [Yee, Catalina - FSIS](#); [Zipperer, Sam - FSIS](#); [Zukas, Audrius - FSIS](#); [Amber McCoig](#); [Amy Frankshun](#); [Andrew Yeung](#); [Annamaria Castiglia](#); [Kim, Anne](#); [Anthony Adeuya](#); [Art Liang](#); [Bruce Cooper](#); [Cathy Burns](#); [Chad Hamel](#); [Chawan, Chandramohan - AMS](#); [Chin, Teung](#); [Christine Karbiwnyk](#); [Olinger, Christine](#); [Hrды, David](#); [Domesle, Alexander - ARS](#); [Eric Nelson](#); [Liem, Francisca](#); [George Salem](#); [Haynes, Diana - AMS](#); [Hiranthi Jayasuriya](#); [Encarnacion, Ideliz](#); [Sterling, Isaac - AMS](#); [Jack Lohne](#); [Jeffrey Hamer](#); [John Sheehan](#); [Johnny Braddy](#); [Justin Carr](#); [Karen Ekelman](#); [Smith, KerryR - AMS](#); [Kunickis, Sheryl - OSEC](#); [Lindsay, James](#); [Lombard, Jason E - APHIS](#); [Lydia Rosas-Marty](#); [Lynn Friedlander](#); [Marguerite Pappaioanou](#); [Marianne Ross](#); [Mark Madson](#); [Mary Carson](#); [Michael Zimmerman](#); [Neal Bataller](#); [Pak Chu](#); [Patrick Ayres](#); [Paul Bachman](#); [Paul South](#); [Philip Kijak](#); [Reddy, Shanker - AMS](#); [Richard Wang](#); [Winfield, Sarah](#); [Schroeder, Carl - AMS](#); [Selen Stromgren](#); [Sherri Turnipseed](#); [Stephen Trostle](#); [Lehotay, Steven](#); [Susan Clark](#); [Terry Councell](#); [Nguyen, Thuy](#); [Wai Shan So](#); [Wendy Andersen](#); [Yelena Sapozhnikova](#); [Hopkins, Yvette](#)  
**Subject:** RE: IRCG Meeting Minutes October 2015  
**Date:** Thursday, November 12, 2015 10:18:58 AM  
**Attachments:** [Draft IRCG minutes 28 October 2015.doc](#)

---

Sorry forgot to attach minutes.

---

**From:** Duverna, Randolph - FSIS  
**Sent:** Thursday, November 12, 2015 10:10 AM  
**To:** Jones, Jonathan M - APHIS; Marschman, Brian L - APHIS; Abdelmajid, Naser - FSIS; Alexander, Nacola - FSIS; Anthenill, Lucy - FSIS; Arrington, Isabel - FSIS; Basu, Pat - FSIS; Bauer, Nathan - FSIS; Bennett, Patty - FSIS; Bluhm, Louis - FSIS; Bronstein, Philip - FSIS; Casole, Eugene - FSIS; Chittum, Linda - FSIS; Cruickshank, Lynn - FSIS; Dearfield, Kerry - FSIS; Dessai, Uday - FSIS; Disney, Terry - FSIS; Dobson, Ken - FSIS; Dutko, Terry - FSIS; Duverna, Randolph - FSIS; Edelstein, Rachel - FSIS; Esteban, Emilio - FSIS; Flynn, Eric - FSIS; Garrett, Stefanie - FSIS; Glodowske, Angela - FSIS; Goldman, David - Commissioned Corps - FSIS; Hambright, Troy - FSIS; Hess, James - FSIS; Hicks, John - FSIS; Highland, Jennifer - FSIS; Hojjat, Maryam - FSIS; Holland, Kathleen - FSIS; Holt, Kristin - FSIS; Holterman, James - FSIS; Hortert, Larry - FSIS; Hulsey, Laura - FSIS; Johnston, John - FSIS; Kelley, Mike - FSIS; Kishore, Rita - FSIS; LaBarre, Davi - FSIS; Larson, Renee - FSIS; Melita, Paul - FSIS; MunizOrtiz, Jorge - FSIS; Ng, Chilton - FSIS; Nyanzi, Frederick - FSIS; O'Keefe, Margaret - FSIS; Ou, Oliver - FSIS; Pixley, Charles - FSIS; Quinn, Maritza - FSIS; Rentz, Casey - FSIS; Rockwell, Catherine - Commissioned Corps - FSIS; Schulz, Kurt - FSIS; Scifres, Jenny - FSIS; Smith, David - FSIS; Stubban, Milo - FSIS; Tankson, Jeanetta - FSIS; Thaler, Alice - FSIS; Vermeersch, Thomas - FSIS; Yee, Catalina - FSIS; Zipperer, Sam - FSIS; Zukas, Audrius - FSIS; 'Amber McCoig'; 'Amy Frankshun'; 'Andrew Yeung'; 'Annamaria Castiglia'; 'Anne Kim'; 'Anthony Adeuya'; 'Art Liang'; 'Bruce Cooper'; 'Cathy Burns'; 'Chad Hamel'; 'Chandramohan Chawan'; Chin, Teung; 'Christine Karbiwnyk'; 'Christine Olinger'; 'David Hrды'; Domesle, Alexander - ARS; 'Eric Nelson'; 'Francisca Liem'; 'George Salem'; Haynes, Diana - AMS; 'Hiranthi Jayasuriya'; 'Ideliz Encarnacion'; 'Isaac Sterling'; 'Jack Lohne'; 'Jeffrey Hamer'; 'John Sheehan'; 'Johnny Braddy'; 'Justin Carr'; 'Karen Ekelman'; 'Kerry Smith'; Kunickis, Sheryl - OSEC; Lindsay, James; Lombard, Jason E - APHIS; 'Lydia Rosas-Marty'; 'Lynn Friedlander'; 'Marguerite Pappaioanou'; 'Marianne Ross'; 'Mark Madson'; 'Mary Carson'; 'Michael Zimmerman'; 'Neal Bataller'; 'Pak Chu'; 'Patrick Ayres'; 'Paul Bachman'; 'Paul South'; 'Philip Kijak'; Reddy, Shanker - AMS; 'Richard Wang'; 'Sarah Winfield'; Schroeder, Carl - AMS; 'Selen Stromgren'; 'Sherri Turnipseed'; 'Stephen Trostle'; 'Steve Lehotay'; 'Susan Clark'; 'Terry Councell'; 'Thuy Nguyen'; 'Wai Shan So'; 'Wendy Andersen'; 'Yelena Sapozhnikova'; 'Yvette Hopkins'  
**Subject:** IRCG Meeting Minutes October 2015

Hello IRCG,

Attached are the minutes from the October 28 IRCG meeting. Additional information will follow for the upcoming meeting on December 2.

Please note: That some names may be missed from attendee list, please add any name that have been missed.

Thank you.

Randy

Randolph Duverna, PhD

Chemist, Science Staff

USDA/FSIS/OPHS

Stop 3766, PP3, Cubicle 9-227A

1400 Independence Ave., SW

Washington, DC 20250-3700

Phone: 202-690-6607

Fax: 202-690-6337

[Randolph.duverna@fsis.usda.gov](mailto:Randolph.duverna@fsis.usda.gov)

**From:** [Bluhm, Louis - FSIS](#)  
**To:** [Miller, David](#)  
**Cc:** [Yee, Catalina - FSIS](#); [Hrdy, David](#)  
**Subject:** RE: MGK-264 pesticide question  
**Date:** Friday, October 02, 2015 9:24:38 AM  
**Attachments:** [PDP Residue Priority List \(WLandLOAS\) 06-17-2015.docx](#)

---

Good morning David,

I meant the priority table that your office provided to us and that we have modified and have been working from to add compounds to our PST5 screening method. MGK-264 is in the Highest Priority category. Attached is our most recent copy.

Thanks,

**Lou**

---

**From:** Miller, David [mailto:Miller.DavidJ@epa.gov]  
**Sent:** Thursday, October 01, 2015 6:54 PM  
**To:** Bluhm, Louis - FSIS  
**Cc:** Yee, Catalina - FSIS; Hrdy, David  
**Subject:** RE: MGK-264 pesticide question

Hello Lou,

We are looking into this. Can you please define the "tolerance table" that you refer to in your email below as in "...even though the tolerance table that both EPA and FSIS have been working from has no tolerance listed."

There are a number of thoughts and ideas we can add later in a subsequent communication, but I'd like to check out the "tolerance table" source to which you are referring.

David.

---

**From:** Bluhm, Louis - FSIS [mailto:Louis.Bluhm@fsis.usda.gov]  
**Sent:** Wednesday, September 30, 2015 10:32 AM  
**To:** Hrdy, David; Miller, David  
**Cc:** Yee, Catalina - FSIS  
**Subject:** FW: MGK-264 pesticide question

Good morning David and David,

(b) (5)

Thanks for your feedback,  
**Lou**

---

**From:** Bluhm, Louis - FSIS  
**Sent:** Monday, September 28, 2015 7:28 AM  
**To:** Yee, Catalina - FSIS  
**Cc:** Rivera, John - FSIS; Esteban, Emilio - FSIS; Pixley, Charles - FSIS  
**Subject:** RE: MGK-264 pesticide question

Hi Catalina,

(b) (5)

Thanks,  
**Lou**

---

**From:** Yee, Catalina - FSIS  
**Sent:** Friday, September 25, 2015 3:26 PM  
**To:** Bluhm, Louis - FSIS  
**Subject:** FW: Drug tolerance data extract  
**Importance:** High

Hi Lou,

(b) (6)

Thanks,  
Catalina

---

**From:** Jones, Michael - FSIS  
**Sent:** Friday, September 25, 2015 11:43 AM  
**To:** Yee, Catalina - FSIS  
**Subject:** FW: Drug tolerance data extract  
**Importance:** High

(b) (5)

Michael E. Jones  
Chemist/LIMS Manager  
USDA-FSIS-OPHS  
Western Laboratory  
620 Central Avenue, Building 2A  
Alameda, CA 94501  
Phone: 510-814-3013  
Fax: 510-814-3090  
e-mail: [michael.jones@fsis.usda.gov](mailto:michael.jones@fsis.usda.gov)

\*\*\*\*\*

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\*\*\*\*\*

---

**From:** Blank, David - FSIS  
**Sent:** Friday, September 25, 2015 10:47 AM  
**To:** McSherry, Mike - OCIO  
**Cc:** FSIS - LIMS Admins - All; Yee, Catalina - FSIS  
**Subject:** RE: Drug tolerance data extract

Mike,

(b) (5)

David A Blank  
Microbiologist, LIMS Specialist  
USDA-FSIS-OPHS Midwestern Lab  
4300 Goodfellow Blvd. Bldg 105 D  
St Louis, MO  
Desk:314-263-2693 ext. 309 Blackberry: 314-614-5142 Fax: 314-263-2679

[David.Blank@fsis.usda.gov](mailto:David.Blank@fsis.usda.gov)

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---

**From:** McSherry, Mike - OCIO  
**Sent:** Friday, September 25, 2015 12:03 PM  
**To:** Blank, David - FSIS  
**Subject:** RE: Drug tolerance data extract

Hello David,

You provided me an extract of the tolerance tables from LIMS back in April. A new violation has been reported for a pesticide type residue that I don't see in the spreadsheet you provided then (see scanned Sample Results Collection form, attached). It is MGK-264 and would be test 2662. Would there be tolerance values for this specified in LIMS now that you could provide so I could add them to RVIS?

Thanks,  
Mike McSherry

---

**From:** Blank, David - FSIS  
**Sent:** Thursday, April 09, 2015 6:37 AM  
**To:** McSherry, Mike - OCIO; Graves, Gail - FSIS  
**Cc:** FSIS - LIMS Admins - All; Dutko, Terry - FSIS  
**Subject:** RE: Drug tolerance data extract

Mike,

There were some formatting problems on that last spreadsheet. Please use this one instead.

David A Blank  
Microbiologist, LIMS Specialist  
USDA-FSIS-OPHS Midwestern Lab  
4300 Goodfellow Blvd. Bldg 105 D  
St Louis, MO  
Desk: 314-263-2693 ext. 309 Blackberry: 314-614-5142 Fax: 314-263-2679

[David.Blank@fsis.usda.gov](mailto:David.Blank@fsis.usda.gov)

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---

**From:** Blank, David - FSIS  
**Sent:** Thursday, April 09, 2015 7:13 AM  
**To:** McSherry, Mike - OCIO; Graves, Gail - FSIS  
**Cc:** FSIS - LIMS Admins - All; Dutko, Terry - FSIS  
**Subject:** RE: Drug tolerance data extract

Mike,

This is the current Tolerance Table from LIMS. The table is updated daily from the same table in M2K. The M2K table is update by the FSIS Residue staff.

David A Blank  
Microbiologist, LIMS Specialist  
USDA-FSIS-OPHS Midwestern Lab  
4300 Goodfellow Blvd. Bldg 105 D  
St Louis, MO  
Desk:314-263-2693 ext. 309 Blackberry: 314-614-5142 Fax: 314-263-2679

[David.Blank@fsis.usda.Gov](mailto:David.Blank@fsis.usda.Gov)

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---

**From:** Graves, Gail - FSIS  
**Sent:** Thursday, April 09, 2015 6:47 AM  
**To:** FSIS - LIMS Admins - All  
**Cc:** McSherry, Mike - OCIO  
**Subject:** FW: Drug tolerance data extract

Would someone please provide Mike McSherry the information he is requesting? Thanks!

*Gail C. Graves*, Program Analyst/Sampling Coordinator

---

**From:** McSherry, Mike - OCIO  
**Sent:** Wednesday, April 08, 2015 4:38 PM  
**To:** Graves, Gail - FSIS  
**Subject:** Drug tolerance data extract

Hello Gail,

FDA is reviewing their CFR drug tolerance specifications is interested in having the tables in RVIS and first comparing those w/what your sampling operation uses for specification with incoming lab result data....

Would it be possible to get an extract of the data table(s) used for this purpose?  
I.e. residue name (and number), animal type, tissue type and tolerance, etc...

We have done this in the past, I believe from the old M2K system... but I don't remember the exact route that was taken.

Thanks for any assistance!

Mike



**From:** [Bluhm, Louis - FSIS](#)  
**To:** [Miller, David](#)  
**Cc:** [Yee, Catalina - FSIS](#); [Ben-Ghaly, Labeed](#); [Hrdy, David](#); [Crowley, Matthew](#)  
**Subject:** RE: MGK-264 pesticide question  
**Date:** Friday, October 09, 2015 1:11:35 PM  
**Attachments:** [image001.png](#)

---

Thank you very much for all of the information. I believe we now know how to apply these tolerances, but if we have more questions we will let you know.

Have a nice long weekend,

**Lou**

---

**From:** Miller, David [mailto:Miller.DavidJ@epa.gov]  
**Sent:** Thursday, October 08, 2015 3:19 PM  
**To:** Bluhm, Louis - FSIS  
**Cc:** Yee, Catalina - FSIS; Ben-Ghaly, Labeed; Hrdy, David; Crowley, Matthew  
**Subject:** RE: MGK-264 pesticide question

And one think I should have mentioned, but that might not necessarily be self-evident to everyone.

When we register pesticides, we can register them for crack and crevice, space spray, broadcast spray, bait uses, etc. inside building structures. Sometimes those structures include food handling establishments (FHE's) including restaurants, bakeries, food manufacturing facilities, slaughterhouses, etc. and these uses are generally specifically indicated as ok on the label. As a result, we can sometimes set tolerances ("FHE tolerances") that would cover those uses for those cases where the pesticide may actually contaminate the food. For example, if we allow use of MGK-264 pesticide in FHE's, we would establish an FHE tolerance for this pesticide and this would mean if FSIS was found in a carcass in a slaughterhouse at levels at or below the FHE tolerance, then this could reasonably be determined by the enforcement authority to be a legal presence of the pesticide in that food.

Maybe self-evident to you already - but I thought it might help to those that were less familiar with some of the nuances of tolerance setting.

David.

---

David J. Miller CAPT | USPHS  
Chief, Chemistry & Exposure Branch  
and Acting Chief, Toxicology & Epidemiology Branch  
Health Effects Division  
Office of Pesticide Programs  
703-305-5352 (voice)  
703-305-5147 (fax)

Visit [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

---

**From:** Miller, David  
**Sent:** Thursday, October 08, 2015 2:17 PM  
**To:** 'Bluhm, Louis - FSIS'  
**Cc:** Yee, Catalina - FSIS; Hrdy, David; Ben-Ghaly, Labeed; Hrdy, David; Crowley, Matthew  
**Subject:** RE: MGK-264 pesticide question

Hello Lou,

I agree. Matt's explanation below was very good and thorough.

You further ask for any guidance that EPA could provide on interpreting food handling establishment (FHE) tolerances for FSIS regulatory enforcement purposes. I have attached a guidance document that we use (or perhaps more accurately: have used in the past?) on this. Table 1 below is an excerpt from that:

| Table 1—Categories and Representative Types of Food Handling Establishments |                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category                                                                    | Representative Types                                                                                                                                                                                                                                                                                                                        |
| Food services <sup>1</sup> .....                                            | Restaurants, cafeterias, taverns, delicatessens, mess halls, school and institutional dining areas, hospitals, mobile canteens, vending machines, grocery stores and markets.                                                                                                                                                               |
| Manufacturing establishments <sup>2</sup> .....                             | Plants engaged in the manufacture of candy, ice cream, spaghetti or macaroni, food mixes, or breakfast cereal and bakeries, breweries, wineries, soft drink bottling plants, pizza plants.                                                                                                                                                  |
| Processing establishments <sup>3</sup> .....                                | Plants engaged in the slaughtering and/or packing of meats, poultry, and seafood; dairies and plants engaged in the processing of dairy products; plants engaged in the processing of spices and herbs, edible fats and oils, beverages (coffee, tea), and frozen fresh food; fruit and vegetable canneries; pickle factories; grain mills. |

<sup>1</sup> Any food handling establishment whose principal business involves the sale of food directly to the consuming public. The manufacture and/or processing of food by such an establishment is only incidental to achieving its principal business objective.

<sup>2</sup> Any food handling establishment whose principal business involves the production and/or packaging of man-made foods which are normally intended for sale through or by food service establishments. Such foods generally comprise two or more ingredients which have been altered in such a manner as to change their basic identity.

<sup>3</sup> Any food handling establishment whose principal business involves the upgrading and/or preservation of raw agricultural commodities in such a manner as to maintain their essential identity. Such establishments may sell their product directly to the consuming public and/or food service or food handling establishments.

As you can see (the attached document contains this table in a much more legible form), slaughter plants are clearly named as a type of Food Handling Establishment (FHE) and FSIS would presumably interpret FHE tolerances as including residues that were detected in meat, poultry, seafood, dairy, etc. as arising from treatment of such FHE's (particularly if MGK-264 has documented use in that plant).

If you are interested in more information, please let me know. We can talk about how I believe FDA interprets these FHE tolerances, but I think their situations are a bit less straightforward than yours. Let me know. Possibly this can be on the agenda of a future residue chemistry monthly conference call.

Finally, you mention in your last email about advice about going to GlobalMRL.com for tolerances. I think that is a good idea, particularly if you are looking up tolerances by commodity rather than chemical.

David.

---

David J. Miller CAPT | USPHS

Chief, Chemistry & Exposure Branch  
and Acting Chief, Toxicology & Epidemiology Branch  
Health Effects Division  
Office of Pesticide Programs  
703-305-5352 (voice)  
703-305-5147 (fax)

Visit [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

-----Original Message-----

From: Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]

Sent: Friday, October 02, 2015 11:59 AM

To: Crowley, Matthew; Miller, David

Cc: Yee, Catalina - FSIS; Hrdy, David; Ben-Ghaly, Labeed

Subject: RE: MGK-264 pesticide question

(b) (5)

Thanks,  
Lou

-----Original Message-----

From: Crowley, Matthew [<mailto:Crowley.Matthew@epa.gov>]

Sent: Friday, October 02, 2015 10:40 AM

To: Miller, David; Bluhm, Louis - FSIS

Cc: Yee, Catalina - FSIS; Hrdy, David

Subject: RE: MGK-264 pesticide question

Hi all,

First, MGK-264 is listed as "highest priority" because PDP detected it in beef/poultry/pork. Full stop.

I do not believe the "priority table" says anything about tolerances for MGK-264. Where tolerances are used/indicated in the table for any chemical are first dependent on whether FSIS had any detects in a dataset from 2013 (see column "FSIS Detects 2013"). So if those columns are blank, it means that FSIS didn't detect that chemical and we didn't proceed with any further calculations using tolerances. So blanks in the table shouldn't be read as "no tolerances". Where there were FSIS detects and we proceeded to attempt some calculations for a chemical and that chemical didn't have a tolerance we listed "NT". So MGK-264 is blank, not because it doesn't have a tolerance, but because it wasn't detected in the FSIS dataset supplied for doing some calculations. We would not recommend relying on that table for determining tolerances.

All that said, you'll still wind up asking us whether MGK-264 has a tolerance on beef/pork/poultry and we'll be back to the perennial dilemma of how "food handling establishment" tolerances are handled in an enforcement setting. And we can discuss that further with you. As David mentioned, this has come up with FDA in terms of enforcing tolerances for fruits, veggies, etc.).

-Matt

---

From: Miller, David

Sent: Friday, October 2, 2015 9:35 AM

To: Bluhm, Louis - FSIS

Cc: Yee, Catalina - FSIS; Hrdy, David; Crowley, Matthew

Subject: FW: MGK-264 pesticide question

Ok. Thanks. I guessed that originally, but didn't see (or recall there even being) the tolerances listed there.

I am still confused by when you say "even though the tolerance table that both EPA and FSIS have been working from has no tolerance listed" in the context of FSIS treating or not treating this compound as having a tolerance of 5 ppm.

Maybe the above is minutia and it may be better for you to ask your question again. Are you wondering how to interpret an FHE tolerance on "all foods" in the context of FSIS sampling operation/carcass? Or are you wondering why this is a high priority. Or is it something else?

FDA is doing (has begun to do? Might be doing? ) what we consider some strange things with FHE tolerances. And that is why I think we need to understand your question fully before answering and letting you know what we understand they are doing.

David.

From: Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]

Sent: Friday, October 02, 2015 9:24 AM

To: Miller, David

Cc: Yee, Catalina - FSIS; Hrdy, David

Subject: RE: MGK-264 pesticide question

Good morning David,

(b) (5)

Thanks,

Lou

From: Miller, David [<mailto:Miller.DavidJ@epa.gov>]

Sent: Thursday, October 01, 2015 6:54 PM

To: Bluhm, Louis - FSIS

Cc: Yee, Catalina - FSIS; Hrdy, David

Subject: RE: MGK-264 pesticide question

Hello Lou,

We are looking into this. Can you please define the "tolerance table" that you refer to in your email below as in "...even though the tolerance table that both EPA and FSIS have been working from has no tolerance listed."

There are a number of thoughts and ideas we can add later in a subsequent communication, but I'd like to check out the "tolerance table" source to which you are referring.

David.

From: Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]  
Sent: Wednesday, September 30, 2015 10:32 AM  
To: Hrды, David; Miller, David  
Cc: Yee, Catalina - FSIS  
Subject: FW: MGK-264 pesticide question

Good morning David and David,

(b) (5)

Thanks for your feedback,  
Lou

From: Bluhm, Louis - FSIS  
Sent: Monday, September 28, 2015 7:28 AM  
To: Yee, Catalina - FSIS  
Cc: Rivera, John - FSIS; Esteban, Emilio - FSIS; Pixley, Charles - FSIS  
Subject: RE: MGK-264 pesticide question

Hi Catalina,

(b) (5)

Thanks,  
Lou

From: Yee, Catalina - FSIS  
Sent: Friday, September 25, 2015 3:26 PM  
To: Bluhm, Louis - FSIS  
Subject: FW: Drug tolerance data extract

Importance: High

Hi Lou,

(b) (5)

Thanks,  
Catalina

From: Jones, Michael - FSIS  
Sent: Friday, September 25, 2015 11:43 AM  
To: Yee, Catalina - FSIS  
Subject: FW: Drug tolerance data extract  
Importance: High

(b) (5)

Michael E. Jones  
Chemist/LIMS Manager  
USDA-FSIS-OPHS  
Western Laboratory  
620 Central Avenue, Building 2A  
Alameda, CA 94501  
Phone: 510-814-3013  
Fax: 510-814-3090  
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\*\*\*\*\*

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\*\*\*\*\*

From: Blank, David - FSIS  
Sent: Friday, September 25, 2015 10:47 AM  
To: McSherry, Mike - OCIO  
Cc: FSIS - LIMS Admins - All; Yee, Catalina - FSIS  
Subject: RE: Drug tolerance data extract

Mike,

(b) (5)

David A Blank  
Microbiologist, LIMS Specialist  
USDA-FSIS-OPHS Midwestern Lab  
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St Louis, MO  
Desk:314-263-2693 ext. 309 Blackberry: 314-614-5142 Fax: 314-263-2679

[David.Blank@fsis.usda.Gov](mailto:David.Blank@fsis.usda.Gov)<mailto:David.Blank@fsis.usda.Gov>

"This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately."

From: McSherry, Mike - OCIO  
Sent: Friday, September 25, 2015 12:03 PM  
To: Blank, David - FSIS  
Subject: RE: Drug tolerance data extract

Hello David,

(b) (5)

Thanks,  
Mike McSherry

From: Blank, David - FSIS  
Sent: Thursday, April 09, 2015 6:37 AM  
To: McSherry, Mike - OCIO; Graves, Gail - FSIS  
Cc: FSIS - LIMS Admins - All; Dutko, Terry - FSIS  
Subject: RE: Drug tolerance data extract

Mike,

There were some formatting problems on that last spreadsheet. Please use this one instead.



David A Blank  
Microbiologist, LIMS Specialist  
USDA-FSIS-OPHS Midwestern Lab  
4300 Goodfellow Blvd. Bldg 105 D  
St Louis, MO  
Desk:314-263-2693 ext. 309 Blackberry: 314-614-5142 Fax: 314-263-2679

[David.Blank@fsis.usda.Gov](mailto:David.Blank@fsis.usda.Gov)<<mailto:David.Blank@fsis.usda.Gov>>

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From: Blank, David - FSIS  
Sent: Thursday, April 09, 2015 7:13 AM  
To: McSherry, Mike - OCIO; Graves, Gail - FSIS  
Cc: FSIS - LIMS Admins - All; Dutko, Terry - FSIS  
Subject: RE: Drug tolerance data extract

Mike,  
This is the current Tolerance Table from LIMS. The table is updated daily from the same table in M2K. The M2K table is update by the FSIS Residue staff.

David A Blank  
Microbiologist, LIMS Specialist  
USDA-FSIS-OPHS Midwestern Lab  
4300 Goodfellow Blvd. Bldg 105 D  
St Louis, MO  
Desk:314-263-2693 ext. 309 Blackberry: 314-614-5142 Fax: 314-263-2679

[David.Blank@fsis.usda.Gov](mailto:David.Blank@fsis.usda.Gov)<<mailto:David.Blank@fsis.usda.Gov>>

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From: Graves, Gail - FSIS  
Sent: Thursday, April 09, 2015 6:47 AM  
To: FSIS - LIMS Admins - All  
Cc: McSherry, Mike - OCIO  
Subject: FW: Drug tolerance data extract

Would someone please provide Mike McSherry the information he is requesting? Thanks!

Gail C. Graves, Program Analyst/Sampling Coordinator

From: McSherry, Mike - OCIO

Sent: Wednesday, April 08, 2015 4:38 PM

To: Graves, Gail - FSIS

Subject: Drug tolerance data extract

Hello Gail,

FDA is reviewing their CFR drug tolerance specifications is interested in having the tables in RVIS and first comparing thoses w/what your sampling operation uses for specification with incoming lab result data....

Would it be possible to get an extract of the data table(s) used for this purpose?

I.e. residue name (and number), animal type, tissue type and tolerance, etc...

We have done this in the past, I believe from the old M2K system... but I don't remember the exact route that was taken.

Thanks for any assistance!

Mike

Jorge G. Muñiz Ortiz, Ph.D.  
Lieutenant, U.S. Public Health Service  
Senior Assistant Toxicologist  
U.S. Department of Agriculture  
Food Safety and Inspection Service  
Office of Public Health Science  
Science Staff

**From:** Hrdy, David [mailto:Hrdy.David@epa.gov]  
**Sent:** Thursday, April 30, 2015 3:27 PM  
**To:** MunizOrtiz, Jorge - FSIS  
**Subject:** RE: Pesticide list

David

$$\langle \dots \rangle = \langle \dots \rangle_{\text{eq}}$$

**David E. Hrdy**  
Senior Scientist  
CEB/HED/OPP/OCSP  
US EPA [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
Mailcode 7509P  
Telephone: **703.305.6990**  
Fax: 703.305.5147  
OFFICE 10238 Potomac Yard 1 (South)

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From: MunizOrtiz, Jorge - FSIS [<mailto:Jorge.MunizOrtiz@FSIS.USDA.gov>]

Sent: Thursday, April 30, 2015 3:23 PM

To: Hrды, David

Subject: Pesticide list

David,

We are doing something here at work (Chemical hazard ID ranking) and I want to validate our modeling using the pesticide ranking you had sent us last year. Do you happen to have an excel spreadsheet with those? And, I wanted to know: the ranking on that list is based on 4 priority groups, but was a priority list drafted within the groups? They are in alphabetical order within the group, but did someone prioritize them based on specific variables?

I hope you understand my questions.

We can always setup a phone call to talk about this.

Jorge

Jorge G. Muńiz Ortiz, Ph.D.
Lieutenant, U.S. Public Health Service
Senior Assistant Toxicologist
U.S. Department of Agriculture
Food Safety and Inspection Service
Office of Public Health Science
Science Staff

Voice: 202.690.6128

Fax: 202.690.6364

Email: jorge.munizortiz@fsis.usda.gov

From: [Bluhm, Louis - FSIS](#)
To: [Miller, David](#)
Cc: [Nako, Steve](#); [Crowley, Matthew](#); [Hrdy, David](#); sarkar.bayzid@epa.gov; [Ou, Oliver - FSIS](#); [Ng, Chilton - FSIS](#); [Lehotay, Steven](#)
Subject: RE: Updated levels for pesticides
Date: Monday, July 20, 2015 11:29:18 AM

Hi David,

I will be on official travel and training from July 23 - August 7, returning to the office on Monday August 10. Part of that time I will be presenting on the NRP, along with David Hrdy, at IAFP. I realize you are not back in the office yet and have not had an opportunity to discuss this internally.

If you need for LQAS to broker a call among your group, Steve's group at ARS, and us in FSIS before I return, please let Chilton Ng know (cc'd on this email). Either he or Oliver, whom you met when we visited your facility last fall, would be available to set up the call on my behalf.

Thanks,
Lou

-----Original Message-----

From: Miller, David [<mailto:Miller.DavidJ@epa.gov>]
Sent: Thursday, July 16, 2015 6:44 AM
To: Lehotay, Steven
Cc: Nako, Steve; Crowley, Matthew; Hrdy, David; Bluhm, Louis - FSIS; sarkar.bayzid@epa.gov; Ou, Oliver - FSIS
Subject: RE: Updated levels for pesticides

Hello Steve,

I will be back in the office on 21 July (Tuesday) and will get together with folks in EPA then to discuss.

One thing to remember re: the normal public version of Globalmrl.com: it includes foreign MRL's only if a US tolerance exists. So there may be foreign uses and MRL's that you would be unaware of though GlobalMRL.com, but may have an interest in since there are non-US MRLs. The Enterprise version of GlobalMRL.com is something that both you at USDA and us at EPA will have access to - it's just that funding is being worked out now and it is not readily available now for self-use. If you have an interest in this, let us know and we can ask BCI to download a spreadsheet for us that we can send to you.

The list we gave Lou is a great start - and possibly sufficient for your needs. It was as good as we had from PDP and sufficient for our risk assessment needs at EPA, being based on the pesticide chemicals we originally received from PDP --prioritized by certain criteria that we stated up front recognizing the resource limitations at FSIS.

As you state below, Lou and his team at FSIS have done a great job, and we feel we are light years beyond where we were not too many years ago.

david.

p.S. the new GlobalMRL.com database does list regulated metabolites in each entry which is a real plus. This wasn't true in the earlier version.

Begin forwarded message:

From: "Hrdy, David" <Hrdy.David@epa.gov<<mailto:Hrdy.David@epa.gov>>>
Date: July 11, 2015 at 2:21:36 AM GMT+7
To: "Bluhm, Louis - FSIS" <Louis.Bluhm@fsis.usda.gov<<mailto:Louis.Bluhm@fsis.usda.gov>>>, "Miller, David" <Miller.DavidJ@epa.gov<<mailto:Miller.DavidJ@epa.gov>>>, "Crowley, Matthew" <Crowley.Matthew@epa.gov<<mailto:Crowley.Matthew@epa.gov>>>
Subject: RE: Updated levels for pesticides

Hi Lou,

I have looked at the attachments briefly. David Miller, our supervisor, is on leave. He is expecting to return around July 21st I think. Let me sit down with Matt to talk about here internally first.

David

><(((^`...`~`...><(((^`...`~`...><(((^`...`~`...><(((^`...`~`...>
David E. Hrdy
Senior Scientist
CEB/HED/OPP/OCSP
US EPA www.epa.gov/pesticides
Mailcode 7509P
Telephone: 703.305.6990
Fax: 703.305.5147
OFFICE 10248 Potomac Yard 1 (South)
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From: Lehotay, Steven  
Sent: Thursday, July 02, 2015 4:07 PM  
To: 'Hrdy, David'; 'Miller.davidj@epa.gov<<mailto:Miller.davidj@epa.gov>>'  
Cc: Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS; Bluhm, Louis - FSIS; Sapozhnikova, Yelena; Johnston, John - FSIS; Ben-Ghaly, Labeed; Han, Lijun - ARS  
Subject: RE: Updated levels for pesticides

Dear Davids,

We need your (EPA) input please prior to the Surveillance Advisory Team meeting in Aug. This is a big deal to us, and at SAT and IRCG meetings, EPA (via Sue Hummel) had been pressing FSIS for years to meet your monitoring needs. FSIS has made big strides to validate and implement the USDA-AMS method (derived from QuEChERS) for routine monitoring in the National Residue Program, and now we're ready to take it to the next level. They're purchasing 2 state-of-the-art GC-MS/MS instruments for this purpose, and we're getting an upgrade of our instrument, too.

Yelena Sapozhnikova et al. have devised a fast, powerful, high-throughput approach to monitor hundreds of targeted pesticides and environmental contaminants in seafood (and other commodities). See the attached publications. We are working with FSIS Western Lab and Lab Quality Assurance Staff to validate and implement the better method in meats and catfish. I expect that more than a million dollars in staff time, instruments, and supplies have already gone into the project to reach this point.

We have done preliminary work for up to 250 analytes in cattle, hog, chicken, and seafood muscle tissue, and we've

decided to move forward with a 1-day validation each of our current list of analytes (see attached EPA-FSIS-ARS Pesticide List 7-2-15) in cattle, chicken, and hog muscle since we have that method ready.

HOWEVER, when we get the instrument upgrade later this summer, we want to validate the final method according to the full FSIS 3-day validation protocol. Thus, we need to FINALIZE the targeted list of analytes and validation levels in cattle, hog, and chicken muscle. I downloaded the MRL spreadsheet from the Global MRL Database to show how we put the attached EPA-FSIS-ARS Pesticide List 7-2-15 together based on the Pesticide Summary Table 6-25-15 that FSIS provided us, presumably working with you/EPA. Also see the email from Lou Bluhm below.

Frankly, we should have all been working together on this list in the first place. It has cost us months of work to reach this point with our current list, only to see that we have scores of pesticides to drop and add before we finalize the method.

I ask EPA and FSIS to look over the EPA-FSIS-ARS list with highlights in blue and green, purple, and black text - bold or not - and make revisions or approvals of our proposed final target list, including more additions. I can't vouch for the accuracy of every single entry, but we've all spent many hours poring through it to reach this state.

In particular, what should we do about the metabolites? The residue definitions can be a real bear, and some pesticides will never occur in tissues even if the animal eats the formulation. Perhaps we should have a conference call about this, and I ask Lou to coordinate that if you all agree.

Thanks very much, and Happy Independence Day!  
Steve

Steven J. Lehotay, PhD  
Lead Scientist  
USDA Agricultural Research Service  
Eastern Regional Research Center  
600 East Mermaid Lane  
Wyndmoor, PA 19038  
USA  
phone: 1-215-233-6433  
fax: 1-215-233-6642  
email: Steven.Lehotay@ars.usda.gov<<mailto:Steven.Lehotay@ars.usda.gov>>  
<http://www.ars.usda.gov/pandp/people/people.htm?personid=3300>

From: Bluhm, Louis - FSIS  
Sent: Thursday, June 25, 2015 4:44 PM  
To: Sapozhnikova, Yelena; Lehotay, Steven  
Cc: Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS  
Subject: Updated levels for pesticides

Hi Yelena and Steve,

(b) (5)

If you have specific questions about the table, feel free to contact us. I will be out of town until July 7, but Oliver should be available to assist in my absence. We are in audit season now, so the staff will be travelling heavily over the next few months, primarily to State laboratories.

Thanks, Lou

Louis Bluhm, Ph.D.

Lead Chemist

Laboratory Quality Assurance Staff (LQAS) Administrator, Accredited Laboratory Program (ALP) USDA FSIS  
OPHS

950 College Station Rd., Athens, GA 30605

Phone: 706-546-2359

Fax: 706-546-3453

Email: louis.bluhm@fsis.usda.gov<<mailto:louis.bluhm@fsis.usda.gov>>



Thanks,  
**Lou**

---

**From:** Lehotay, Steven  
**Sent:** Thursday, July 02, 2015 4:07 PM  
**To:** 'Hrdy, David'; 'Miller.davidj@epa.gov'  
**Cc:** Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS; Bluhm, Louis - FSIS; Sapozhnikova, Yelena; Johnston, John - FSIS; Ben-Ghaly, Labeed; Han, Lijun - ARS  
**Subject:** RE: Updated levels for pesticides

Dear Davids,

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**HOWEVER, when we get the instrument upgrade later this summer, we want to validate the final method according to the full FSIS 3-day validation protocol. Thus, we need to FINALIZE the targeted list of analytes and validation levels in cattle, hog, and chicken muscle.** I downloaded the MRL spreadsheet from the Global MRL Database to show how we put the attached EPA-FSIS-ARS Pesticide List 7-2-15 together based on the Pesticide Summary Table 6-25-15 that FSIS provided us, presumably working with you/EPA. Also see the email from Lou Bluhm below.

Frankly, we should have all been working together on this list in the first place. It has cost us months of work to reach this point with our current list, only to see that we have scores of pesticides to drop and add before we finalize the method.

**I ask EPA and FSIS to look over the EPA-FSIS-ARS list with highlights in blue and green, purple, and black text – bold or not – and make revisions or approvals of our proposed final target list, including more additions. I can't vouch for the accuracy of every single entry, but we've all spent many hours poring through it to reach this state.**

**In particular, what should we do about the metabolites? The residue definitions can be a real**

bear, and some pesticides will never occur in tissues even if the animal eats the formulation. Perhaps we should have a conference call about this, and I ask Lou to coordinate that if you all agree.

Thanks very much, and Happy Independence Day!  
Steve

Steven J. Lehotay, PhD  
Lead Scientist  
USDA Agricultural Research Service  
Eastern Regional Research Center  
600 East Mermaid Lane  
Wyndmoor, PA 19038  
USA  
phone: 1-215-233-6433  
fax: 1-215-233-6642  
email: [Steven.Lehotay@ars.usda.gov](mailto:Steven.Lehotay@ars.usda.gov)  
<http://www.ars.usda.gov/pandp/people/people.htm?personid=3300>

---

**From:** Bluhm, Louis - FSIS  
**Sent:** Thursday, June 25, 2015 4:44 PM  
**To:** Sapozhnikova, Yelena; Lehotay, Steven  
**Cc:** Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS  
**Subject:** Updated levels for pesticides

Hi Yelena and Steve,

(b) (5)

Thanks, Lou

***Louis Bluhm, Ph.D.***

Lead Chemist

Laboratory Quality Assurance Staff (LQAS)

Administrator, Accredited Laboratory Program (ALP)

USDA FSIS OPHS

950 College Station Rd., Athens, GA 30605

Phone: 706-546-2359

Fax: 706-546-3453

Email: [louis.bluhm@fsis.usda.gov](mailto:louis.bluhm@fsis.usda.gov)

**From:** [Bluhm, Louis - FSIS](#)  
**To:** [Lehotay, Steven](#); [Ou, Oliver - FSIS](#); [Miller, David](#); [Ng, Chilton - FSIS](#); [Sapozhnikova, Yelena](#); [Yee, Catalina - FSIS](#); [Duverna, Randolph - FSIS](#); [Ben-Ghaly, Labeed](#); [Han, Lijun - ARS](#)  
**Cc:** [Nako, Steve](#); [Crowley, Matthew](#); [Hrdy, David](#); [Sarkar, Bayazid](#); [Bennett, Patty - FSIS](#); [MunizOrtiz, Jorge - FSIS](#); [Kause, Janell - FSIS](#); [Johnston, John - FSIS](#); [Esteban, Emilio - FSIS](#)  
**Subject:** RE: Updated levels for pesticides  
**Date:** Monday, August 24, 2015 3:13:59 PM  
**Attachments:** [removed.txt](#)

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I will be attending the meeting in person and would be available to assist with finalizing the list.

Thanks, Lou

**Louis Bluhm, Ph.D.**  
Lead Chemist  
Laboratory Quality Assurance Staff (LQAS)  
Administrator, Accredited Laboratory Program (ALP)  
USDA FSIS OPHS  
950 College Station Rd., Athens, GA 30605  
Phone: 706-546-2359  
Fax: 706-546-3453  
Email: [louis.bluhm@fsis.usda.gov](mailto:louis.bluhm@fsis.usda.gov)

---

**From:** Lehotay, Steven  
**Sent:** Thursday, August 20, 2015 2:32 PM  
**To:** Ou, Oliver - FSIS; Miller, David; Bluhm, Louis - FSIS; Ng, Chilton - FSIS; Sapozhnikova, Yelena; Yee, Catalina - FSIS; Duverna, Randolph - FSIS; Ben-Ghaly, Labeed; Han, Lijun - ARS  
**Cc:** Nako, Steve; Crowley, Matthew; Hrdy, David; Sarkar, Bayazid; Bennett, Patty - FSIS; MunizOrtiz, Jorge - FSIS; Kause, Janell - FSIS; Johnston, John - FSIS  
**Subject:** RE: Updated levels for pesticides

Dear all,

The SAT meeting is coming up Aug 27, and I'll be there in DC for it, and perhaps Yelena, too. I would like to have a discussion among interested parties who will be there to help devise the final list of pesticides and levels for our method for FSIS (to also meet EPA needs).

Thank you Oliver for your emails, and I can understand that it is a lot to ask, but it saves time and effort later to get it right from the start. We'll be getting the Agilent 7010 upgrade soon, and we can move forward in the coming months with the proposed targeted list we made, if we have your approval. This could be very time consuming if the optimal MS/MS conditions change from the 7000 instrument, though. Catalina, did you get your 7010 instruments installed yet?

To let you know, we finished a validation study for our current list of about 250 analytes by low-pressure GC-MS/MS and UHPLC-MS/MS in beef, chicken, and pork muscle, and the results were quite good overall. We also analyzed those real samples from Catalina, and Yelena or I'll present the findings at the meeting.

Randy – that is why I ask your patience to wait for the slides of my talk. Yelena has been at the ACS

meeting this week and on a well-deserved family vacation prior to that in Aug.

Best wishes,  
Steve

Steven J. Lehotay, PhD  
Lead Scientist  
USDA Agricultural Research Service  
Eastern Regional Research Center  
600 East Mermaid Lane  
Wyndmoor, PA 19038  
USA  
phone: 1-215-233-6433  
fax: 1-215-233-6642  
email: [Steven.Lehotay@ars.usda.gov](mailto:Steven.Lehotay@ars.usda.gov)  
<http://www.ars.usda.gov/pandp/people/people.htm?personid=3300>

---

**From:** Ou, Oliver - FSIS

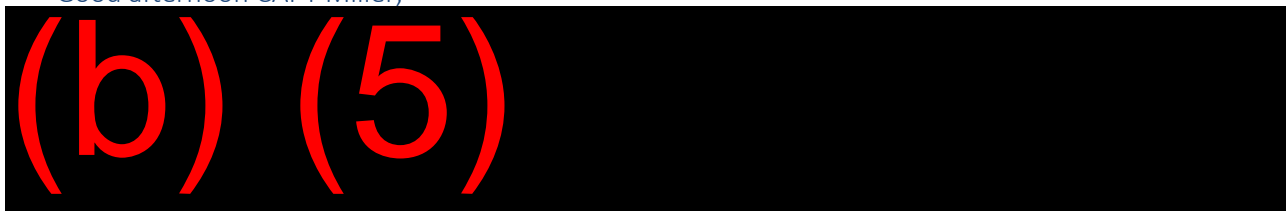
**Sent:** Wednesday, July 29, 2015 4:59 PM

**To:** Miller, David <[Miller.DavidJ@epa.gov](mailto:Miller.DavidJ@epa.gov)>; Bluhm, Louis - FSIS <[Louis.Bluhm@fsis.usda.gov](mailto:Louis.Bluhm@fsis.usda.gov)>; Ng, Chilton - FSIS <[Chilton.Ng@fsis.usda.gov](mailto:Chilton.Ng@fsis.usda.gov)>; Lehotay, Steven <[Steven.Lehotay@ARS.USDA.GOV](mailto:Steven.Lehotay@ARS.USDA.GOV)>

**Cc:** Nako, Steve <[Nako.Steve@epa.gov](mailto:Nako.Steve@epa.gov)>; Crowley, Matthew <[Crowley.Matthew@epa.gov](mailto:Crowley.Matthew@epa.gov)>; Hrdy, David <[Hrdy.David@epa.gov](mailto:Hrdy.David@epa.gov)>; Sarkar, Bayazid <[Sarkar.Bayazid@epa.gov](mailto:Sarkar.Bayazid@epa.gov)>; Bennett, Patty - FSIS <[Patty.Bennett@fsis.usda.gov](mailto:Patty.Bennett@fsis.usda.gov)>; MunizOrtiz, Jorge - FSIS <[Jorge.MunizOrtiz@FSIS.USDA.gov](mailto:Jorge.MunizOrtiz@FSIS.USDA.gov)>; Kause, Janell - FSIS <[Janell.Kause@fsis.usda.gov](mailto:Janell.Kause@fsis.usda.gov)>

**Subject:** RE: Updated levels for pesticides

Good afternoon CAPT Miller,



Oliver

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**From:** Miller, David [<mailto:Miller.DavidJ@epa.gov>]

**Sent:** Monday, July 27, 2015 2:29 PM

**To:** Bluhm, Louis - FSIS; Ou, Oliver - FSIS; Ng, Chilton - FSIS; Lehotay, Steven

**Cc:** Nako, Steve; Crowley, Matthew; Hrdy, David; Sarkar, Bayazid; Bennett, Patty - FSIS; MunizOrtiz, Jorge - FSIS; Kause, Janell - FSIS

**Subject:** RE: Updated levels for pesticides

Please find attached to this the TTB list that I had thought I had sent to a number of you before. LCDR Oliver Ou and I just emailed each other, and it turns out I was mistaken.

This is something we prepared a couple years ago here based on a list from TTB of what analytes in wine they were looking for and what MLRs existed – US and worldwide – in *grapes* and *grapes, wine*, both of which apply to wine. The idea behind this was to provide to them a listing of what “the universe” of pesticides MRLs is and compare this to what TTB was actually looking for. Here is an excerpt of the attached:



By way of example, there is a tolerance on wine for 1,3-dichloropropene in the U.S. and TTB does not look for it. For the next three – 1, methylcyclopropene,, 1-naphthalleneacetamide, and 1-Napthalacetic acid, there are only foreign (“Other”) MRLs and TTB does not look for them. For 2,4-D, there is a US tolerance on wine, but TTB does not look for it. For 2,4-DB, there is only a foreign MLR, but TTB does look for it For acephate, there is only a foreign MRL ,but TTB does look for it. Etc. etc. Our thinking is that this kind of info nicely lays cross-tabulates useful information with respect to what’s being looked for at whether US or no US, but only foreign MLRs exist . Of course, it doesn’t go as far or as deep as what we worked with FSIS with in terms of the Priority list, but it does give an overall view of things that are being looked for and those that are not and how that relates to whether there is a US tolerance or only a foreign MRL.

I guess our question is whether FSIS would find this useful. I haven’t taken a look in detail at Steve Lehotay’s material yet, but it sounded like – from his description of the issue – something like this for animal commodities might be useful to folks. If it is, please let us know.

David.

---

David J. Miller CAPT | USPHS  
Chief, Chemistry & Exposure Branch

and Acting Chief, Toxicology & Epidemiology Branch  
Health Effects Division  
Office of Pesticide Programs  
703-305-5352 (voice)  
703-305-5147 (fax)

Visit [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

---

**From:** Miller, David

**Sent:** Sunday, July 26, 2015 8:01 PM

**To:** 'Bluhm, Louis - FSIS'; Ou, Oliver - FSIS; Ng, Chilton - FSIS; Lehotay, Steven

**Cc:** Nako, Steve; Crowley, Matthew; Hrdy, David; Sarkar, Bayazid; Bennett, Patty - FSIS; 'MunizOrtiz, Jorge - FSIS'; 'Kause, Janell - FSIS'

**Subject:** RE: Updated levels for pesticides

Hello all,

Thanks much.

Here's an update on the status of GlobalMRL.com and its availability. Recall that when EPA spoke at the SAT last year, we spoke of what was coming.

First, the MRLDatabase.com-Enhanced subscription is still currently open access to anyone, anywhere with an internet connection. One just needs to register. This changes on August 26th. This is explained in an announcement on the BCI MRL News service at this link:  
<http://www.bryantchristie.com/blogs/changes-coming-global-mrl-database-free-subscribers>.

EPA is being set up now by BCI with the Enterprise version subscription. This basically provides everything that BCI has. Additional details on what is included are available at <https://www.globalmrl.com/home/subscriptions#subscriptiontypes>. USDA will be set up with this Enterprise system at a later date (I think when their payments get straightened out). Note that while the regular subscription to GlobalMRL.com that will be available to any U.S. entity with an internet connection will only contain foreign MRLs for commodities for which a US registration or tolerance exists, the Enterprise version will contain foreign MRLs for commodities for which US registrations or tolerances do not exist. This will add a number of ai's to the foreign component of the database, and might be useful for surveillance/monitoring purposes.

I know you folks have a particular interest in vet drugs, and these are included in GlobalMRL.com too, courtesy of the (pending) USDA/FAS payment. The veterinary drug interface is – for at least now - a bit different than the one for pesticides and it reflects the older version (that is, prior to the enhanced interface now seen for pesticides.). I understand that BCI intends to update this at a later date –but the information should all be there, at least as it was.



At some point, I am sure BCI will be willing to do one or more web-based demonstrations for folks- this was asked for last year at the SAT. But it was premature at that stage as we were still negotiating the contract.

David.

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David J. Miller CAPT | USPHS

Chief, Chemistry & Exposure Branch  
and Acting Chief, Toxicology & Epidemiology Branch  
Health Effects Division  
Office of Pesticide Programs  
703-305-5352 (voice)  
703-305-5147 (fax)

Visit [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

-----Original Message-----

From: Bluhm, Louis - FSIS [<mailto:Louis.Bluhm@fsis.usda.gov>]

Sent: Monday, July 20, 2015 11:29 AM

To: Miller, David

Cc: Nako, Steve; Crowley, Matthew; Hrdy, David; [sarkar.bayzid@epa.gov](mailto:sarkar.bayzid@epa.gov); Ou, Oliver - FSIS; Ng, Chilton - FSIS; Lehotay, Steven

Subject: RE: Updated levels for pesticides

Hi David,

I will be on official travel and training from July 23 - August 7, returning to the office on Monday August 10. Part of that time I will be presenting on the NRP, along with David Hrdy, at IAFP. I realize you are not back in the office yet and have not had an opportunity to discuss this internally.

If you need for LQAS to broker a call among your group, Steve's group at ARS, and us in FSIS before I return, please let Chilton Ng know (cc'd on this email). Either he or Oliver, whom you met when we visited your facility last fall, would be available to set up the call on my behalf.

Thanks,  
Lou

-----Original Message-----

From: Miller, David [<mailto:Miller.DavidJ@epa.gov>]

Sent: Thursday, July 16, 2015 6:44 AM

To: Lehotay, Steven

Cc: Nako, Steve; Crowley, Matthew; Hrdy, David; Bluhm, Louis - FSIS; [sarkar.bayzid@epa.gov](mailto:sarkar.bayzid@epa.gov); Ou,

Oliver - FSIS

Subject: RE: Updated levels for pesticides

Hello Steve,

I will be back in the office on 21 July (Tuesday) and will get together with folks in EPA then to discuss.

One thing to remember re: the normal public version of Globalmrl.com: it includes foreign MRL's only if a US tolerance exists. So there may be foreign uses and MRL's that you would be unaware of though GlobalMRL.com, but may have an interest in since there are non-US MRLs. The Enterprise version of GlobalMRL.com is something that both you at USDA and us at EPA will have access to - it's just that funding is being worked out now and it is not readily available now for self-use. If you have an interest in this, let us know and we can ask BCI to download a spreadsheet for us that we can send to you.

The list we gave Lou is a great start - and possibly sufficient for your needs. It was as good as we had from PDP and sufficient for our risk assessment needs at EPA, being based on the pesticide chemicals we originally received from PDP --prioritized by certain criteria that we stated up front recognizing the resource limitations at FSIS.

As you state below, Lou and his team at FSIS have done a great job, and we feel we are light years beyond where we were not too many years ago.

david.

p.S. the new GlobalMRL.com database does list regulated metabolites in each entry which is a real plus. This wasn't true in the earlier version.

Begin forwarded message:

From: "Hrdy, David" <[Hrdy.David@epa.gov](mailto:Hrdy.David@epa.gov)<mailto:Hrdy.David@epa.gov>>

Date: July 11, 2015 at 2:21:36 AM GMT+7

To: "Bluhm, Louis - FSIS" <[Louis.Bluhm@fsis.usda.gov](mailto:Louis.Bluhm@fsis.usda.gov)<mailto:Louis.Bluhm@fsis.usda.gov>>, "Miller, David" <[Miller.DavidJ@epa.gov](mailto:Miller.DavidJ@epa.gov)<mailto:Miller.DavidJ@epa.gov>>, "Crowley, Matthew" <[Crowley.Matthew@epa.gov](mailto:Crowley.Matthew@epa.gov)<mailto:Crowley.Matthew@epa.gov>>

Subject: RE: Updated levels for pesticides

Hi Lou,

I have looked at the attachments briefly. David Miller, our supervisor, is on leave. He is expecting to return around July 21st I think. Let me sit down with Matt to talk about here internally first.

David

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David E. Hrdy

Senior Scientist

CEB/HED/OPP/OCSP

US EPA [www.epa.gov/pesticides](http://www.epa.gov/pesticides)<<http://www.epa.gov/pesticides>>

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OFFICE 10248 Potomac Yard 1 (South)

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From: Lehotay, Steven

Sent: Thursday, July 02, 2015 4:07 PM

To: 'Hrdy, David'; 'Miller.davidj@epa.gov'<<mailto:Miller.davidj@epa.gov>>'

Cc: Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS; Bluhm, Louis - FSIS; Sapozhnikova, Yelena; Johnston, John - FSIS; Ben-Ghaly, Labeed; Han, Lijun - ARS

Subject: RE: Updated levels for pesticides

Dear Davids,

We need your (EPA) input please prior to the Surveillance Advisory Team meeting in Aug. This is a big deal to us, and at SAT and IRCG meetings, EPA (via Sue Hummel) had been pressing FSIS for years to meet your monitoring needs. FSIS has made big strides to validate and implement the USDA-AMS method (derived from QuEChERS) for routine monitoring in the National Residue Program, and now we're ready to take it to the next level. They're purchasing 2 state-of-the-art GC-MS/MS instruments for this purpose, and we're getting an upgrade of our instrument, too.

Yelena Sapozhnikova et al. have devised a fast, powerful, high-throughput approach to monitor hundreds of targeted pesticides and environmental contaminants in seafood (and other commodities). See the attached publications. We are working with FSIS Western Lab and Lab Quality Assurance Staff to validate and implement the better method in meats and catfish. I expect that more than a million dollars in staff time, instruments, and supplies have already gone into the project to reach this point.

We have done preliminary work for up to 250 analytes in cattle, hog, chicken, and seafood muscle tissue, and we've decided to move forward with a 1-day validation each of our current list of analytes (see attached EPA-FSIS-ARS Pesticide List 7-2-15) in cattle, chicken, and hog muscle since

we have that method ready.

HOWEVER, when we get the instrument upgrade later this summer, we want to validate the final method according to the full FSIS 3-day validation protocol. Thus, we need to FINALIZE the targeted list of analytes and validation levels in cattle, hog, and chicken muscle. I downloaded the MRL spreadsheet from the Global MRL Database to show how we put the attached EPA-FSIS-ARS Pesticide List 7-2-15 together based on the Pesticide Summary Table 6-25-15 that FSIS provided us, presumably working with you/EPA. Also see the email from Lou Bluhm below.

Frankly, we should have all been working together on this list in the first place. It has cost us months of work to reach this point with our current list, only to see that we have scores of pesticides to drop and add before we finalize the method.

I ask EPA and FSIS to look over the EPA-FSIS-ARS list with highlights in blue and green, purple, and black text - bold or not - and make revisions or approvals of our proposed final target list, including more additions. I can't vouch for the accuracy of every single entry, but we've all spent many hours poring through it to reach this state.

In particular, what should we do about the metabolites? The residue definitions can be a real bear, and some pesticides will never occur in tissues even if the animal eats the formulation. Perhaps we should have a conference call about this, and I ask Lou to coordinate that if you all agree.

Thanks very much, and Happy Independence Day!
Steve

Steven J. Lehotay, PhD
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Eastern Regional Research Center
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USA
phone: 1-215-233-6433
fax: 1-215-233-6642
email: Steven.Lehotay@ars.usda.gov<<mailto:Steven.Lehotay@ars.usda.gov>>
<http://www.ars.usda.gov/pandp/people/people.htm?personid=3300>

From: Bluhm, Louis - FSIS
Sent: Thursday, June 25, 2015 4:44 PM
To: Sapozhnikova, Yelena; Lehotay, Steven
Cc: Ou, Oliver - FSIS; Garrett, Stefanie - FSIS; Zipperer, Sam - FSIS; Yee, Catalina - FSIS
Subject: Updated levels for pesticides

Hi Yelena and Steve,

(b) (5)

Thanks, Lou

Louis Bluhm, Ph.D.

Lead Chemist

Laboratory Quality Assurance Staff (LQAS) Administrator, Accredited Laboratory Program (ALP) USDA
FSIS OPHS

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